

# BUSINESS WEEK

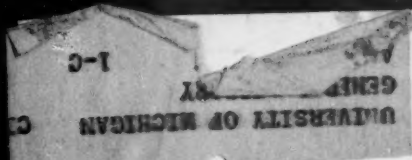
DEC. 11, 1948



Herbert E. Smith: He takes top command at U.S. Rubber (page 6)

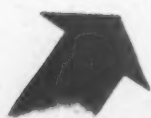
BUSINESS  
WEEK  
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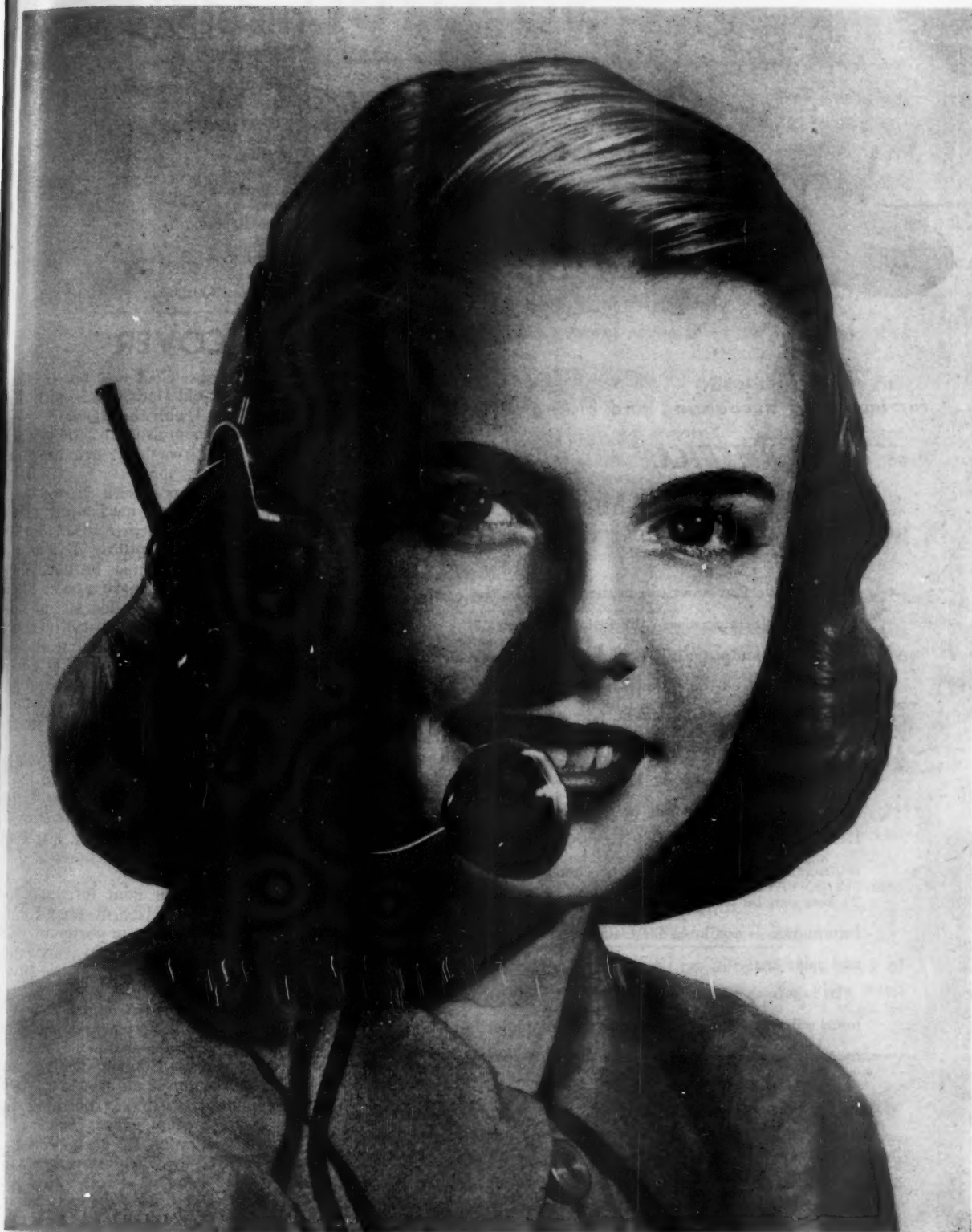
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## THE COVER

U. S. Rubber Co.'s new board chairman, 59-year-old Herbert E. Smith, has spent 35 years with the company. Now he takes top command at a time when the company is rapidly expanding into new fields (page 83).

• **By a Knockout**—Smith started as a salesman of rubber mechanical goods along the San Francisco waterfront. A boxer in his undergraduate days at the University of California, he once used his athletic skill to make a sale. Ships tied up to the docks often staged boxing bouts. Smith figured that if he could compete in one of these contests, he might get the ship's mechanical goods business. He got a bout, won it, and got a contract—not only for that ship's business but also for all the business of the steamship line that owned the vessel.

In 1918, five years after joining the company, Smith was shifted to New York as an assistant sales manager. He became general manager of export operations in 1924, and the next year took charge of U. S. Rubber's non-tire divisions.

• **Climb**—After du Pont interests had acquired control of U. S. Rubber, Smith became vice-president in charge of sales and distribution. Thirteen years later, when Francis Davis gave up the presidency, Smith succeeded to the job.

Smith has adapted himself to the rigors of New York, where U. S. Rubber has its headquarters. He keeps up a winter tan through regular visits to the sun lamps of the New York Athletic Club, a few blocks north of the company's modern office building in Rockefeller Center. He generally has a table reserved for lunch at nearby "21."

• **Outside Interests**—Smith lives in town, takes part in many community projects. He is associated with the Greater New York Fund, the Red Cross, and the Boy Scouts. He is also a director and member of the executive committee of the National Assn. of Manufacturers, and a director of Consolidated Edison Co.

—Complete story on U. S. Rubber starts on page 83. Cover painting by Sheldon Bryan

# BUSINESS OUTLOOK

BUSINESS WEEK  
DECEMBER 11, 1948



The Business Week Index pushed up through 200 this week (page 13). That's higher than it has been at any time since the V-J Day cutbacks.

And yet doubt and hesitation are spreading through business. Even the olive branch that Secretary of Commerce Sawyer extended to the National Assn. of Manufacturers didn't waft the gloom away.

This is another period when the basic strength of the boom is being tested. It is another point at which a downtrend could set in.

•  
More reports of layoffs are coming in.

New England textile mills are dropping workers. A few weeks ago they thought their shakedown was over.

Remington Rand will close its Syracuse (N.Y.) typewriter plant in February. Employment there is around 1,000.

So far, layoffs aren't a drop in the bucket compared to total employment. And expanding industries—for instance, aircraft—more than make up the difference.

But there's the old problem of matching displaced workers with available jobs. It's no help to a Rhode Island mill hand to know that West Coast aircraft plants want workers.

•  
Something is seriously wrong with retail trade.

The Christmas pickup seems to have started at last (page 19). But it is late. And it isn't as big as merchants had expected. Even if the rest of the season is good, many retailers will come out short of what they had hoped.

Stores had expected soft goods sales to be only so-so. What surprised and hurt them was the sudden weakness in heavy appliances.

Many stores report that brisk sales of women's wear have propped up the wavering totals in recent weeks.

•  
Lagging sales catch retailers with their shelves loaded. Department store stocks at the end of October were 15% over 1947.

And the stores had no chance to work inventories down during November. Sales ran well below last year throughout the month.

This means there will be some markdowns after Christmas.

Small dealers are already whacking as much as 20% off the price of refrigerators. They aren't making any profit on that basis. But they need the money to pay their bills.

•  
Consumer incomes are still rising. If people aren't spending their money on goods, what are they doing with it?

Saving a good part of it—that seems to be the answer.

Personal savings have been rising steadily for more than a year. In the second quarter of 1947 they were running at an annual rate of only \$4.1-billion. By the third quarter of this year they were up to an annual rate of \$15.2-billion. And very likely they were even higher than that in October and November.

Why are people saving more? It could be a small-scale buyers' strike. Or it might be the "chronic tendency to over-save" you heard so much about during the depression.

It's true heavy savings can be a drag on a boom. Unless they are invested in a business, they cut into buying power.

But in this case you can look at it another way.

The rate of savings is now so high that it isn't likely to increase much

# BUSINESS OUTLOOK (Continued)

**BUSINESS WEEK**

**DECEMBER 11, 1948**

more. A further increase in consumer incomes would go mostly into consumer spending.

That makes the outlook for retail sales next year somewhat brighter.

Government spending in 1949 promises to brace up any weak spots in the business boom.

But don't forget that there are two sides to the federal budget. Federal tax policy could be a governing factor in business activity next year.

An excess profits tax could easily put a damper on business expenditures for new plant and equipment.

Most companies have been drawing heavily on retained earnings to pay for such programs. With the stock market flat on its back there is no other way to get equity capital.

Higher taxes would cut off this source of funds. And with less earnings being plowed back, business borrowing power would shrink, too.

Business opposition to an excess profits tax isn't going to be unanimous.

Corporate executives have been doing a lot of scratchpad arithmetic. Some have found that an excess profits tax wouldn't hit them so hard as a jump in the regular corporate income tax. This is likely to be true in the lines that have seen falling sales and lower profits lately. Also, some feel it would be easier to repeal an excess profits tax later on.

Philip Cortney, president of Coty, Inc., declared last week that if taxes have to go up, "It is more in line to reinstitute an excess profits tax, much as the speaker objects to its principle."

Auto makers are winding up the year with a bang. Output of cars and trucks in the U. S. and Canada last week was 125,156 units. That's a new high since the end of the war.

Last week also marked the point where 1948 production passed 1947. Output so far this year is 5,106,648, according to Ward's Automotive Reports. In the full year 1947, it was 5,052,523.

Next year, the industry is shooting for 5.7-million. The big worry, as always these days, is steel.

Agricultural policy for 1949 will mean different things to different farmers. For some, it's "Curtail." For others, "Raise more."

A few days ago, Secretary of Agriculture Charles F. Brannan announced marketing quotas for both burley tobacco and peanuts.

In the case of burley, planting of 469,000 acres was decreed. For peanuts, the allotment is 2,611,367 acres.

But on the same day, the Dept. of Agriculture asked more production of chickens, turkeys, sheep and lambs, sweet potatoes, hay.

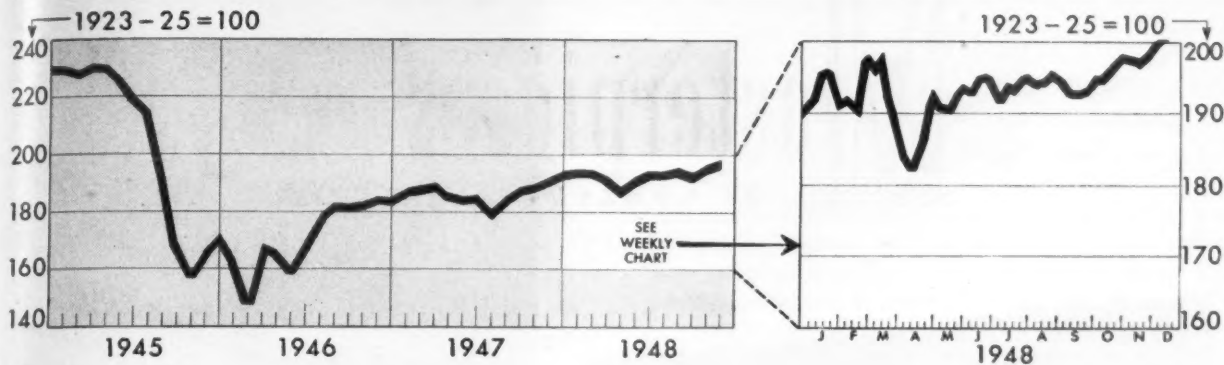
Wheat farmers are cheerfully ignoring the government's lower goals for 1949.

The Dept. of Agriculture estimates that about 80-million acres will be planted. That's more than 10% above the goal of 71.5-million acres.

This year's crop, 1.3-billion bu., was raised on 77.7-million acres.

What's more, the new plantings are off to a good start. There were rains in November. Ground moisture is generally satisfactory. In the cold areas, the wheat already is snuggled down under a snow cover.

# FIGURES OF THE WEEK



**Business Week Index (above)** . . . . . \*200.2 †199.9 197.9 195.0 162.2

## PRODUCTION

	\$ Latest Week	Preceding Week	Month Ago	Year Ago	1941 Average
Steel ingot operations (% of capacity).....	100.0	100.1	99.4	97.7	97.3
Production of automobiles and trucks.....	125,156	†89,482	118,229	110,759	98,236
Engineering const. awards (Eng. News-Rec. 4-week daily av. in thousands)....	\$28,264	\$30,614	\$24,136	\$22,929	\$19,433
Electric power output (million kilowatt-hours).....	5,646	15,349	5,564	5,218	3,130
Crude oil (daily average, 1,000 bbls.).....	5,615	5,617	5,627	5,265	3,842
Bituminous coal (daily average, 1,000 tons).....	1,999	†2,008	2,050	2,410	1,685

## TRADE

Miscellaneous and L.C.L. carloadings (daily average, 1,000 cars).....	82	83	90	89	86
All other carloadings (daily average, 1,000 cars).....	59	60	66	61	52
Money in circulation (millions).....	\$28,325	\$28,305	\$28,254	\$28,817	\$9,613
Department store sales (change from same week of preceding year).....	-5%	-6%	+2%	+10%	+17%
Business failures (Dun & Bradstreet, number).....	126	101	104	60	228

## PRICES (Average for the week)

Cost of Living (U. S. Bureau of Labor Statistics, 1935-39 = 100), Oct... 173.6	.....	.....	174.5	163.8	105.2
Spot commodity index (Moody's, Dec. 31, 1931=100).....	399.6	401.7	401.3	454.8	198.1
Industrial raw materials (U. S. Bureau of Labor Statistics, Aug., 1939=100)...	279.8	280.3	277.9	292.1	138.5
Domestic farm products (U. S. Bureau of Labor Statistics, Aug., 1939=100)...	319.9	320.0	320.4	410.3	146.6
Finished steel composite (Steel, ton).....	\$95.50	\$95.50	\$95.05	\$76.09	\$56.73
Scrap steel composite (Iron Age, ton).....	\$43.00	\$43.00	\$43.00	\$40.25	\$19.48
Copper (electrolytic, Connecticut Valley, lb.).....	23.500¢	23.500¢	23.500¢	21.500¢	12.022¢
Wheat (Kansas City, bu.).....	\$2.33	\$2.32	\$2.24	\$3.04	\$0.99
Sugar (raw, delivered New York, lb.).....	5.72¢	5.68¢	5.68¢	6.32¢	3.38¢
Cotton (middling, ten designated markets, lb.).....	32.20¢	31.83¢	31.23¢	35.85¢	13.94¢
Wool tops (New York, lb.).....	\$1.752	\$1.733	\$1.667	\$1.840	\$1.281
Rubber (ribbed smoked sheets, New York, lb.).....	18.40¢	18.60¢	20.72¢	20.25¢	22.16¢

## FINANCE

90 stocks, price index (Standard & Poor's Corp.).....	120.5	118.1	122.6	117.2	78.0
Medium grade corporate bond yield (30 Baa issues, Moody's).....	3.54%	3.54%	3.53%	3.50%	4.33%
High grade corporate bond yield (30 Aaa issues, Moody's).....	2.81%	2.81%	2.86%	2.85%	2.77%
Call loans renewal rate, N. Y. Stock Exchange (daily average).....	1½-1½%	1½-1½%	1½-1½%	1½-1½%	1.00%
Prime commercial paper, 4-to-6 months, N. Y. City (prevailing rate).....	1½-1½%	1½-1½%	1½-1½%	1½%	½-½%

## BANKING (Millions of dollars)

Demand deposits adjusted, reporting member banks.....	47,341	47,301	46,607	48,247	††27,777
Total loans and investments, reporting member banks.....	62,330	62,462	62,229	65,027	††32,309
Commercial and agricultural loans, reporting member banks.....	15,527	15,545	15,415	14,358	††6,963
Securities loans, reporting member banks.....	2,357	1,783	1,357	1,864	††1,038
U. S. gov't and gov't guaranteed obligations held, reporting member banks.....	33,075	33,073	33,268	37,560	††15,999
Other securities held, reporting member banks.....	4,163	4,177	4,234	4,238	††4,303
Excess reserves, all member banks.....	800	910	880	854	5,290
Total federal reserve credit outstanding.....	23,783	23,941	23,729	22,830	2,265

\*Preliminary, week ending December 4th.

†Revised.

††Date for "Latest Week" on each series on request.

†††Estimate (BW-Jul.12'47,p16).

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# WASHINGTON OUTLOOK



**GUNS AHEAD OF BUTTER?** That's the grim choice Washington is putting to the nation again.

Last week (BW-Dec. 4 '48, p15), we told you that Congress is going to vote the military more money than Truman's \$15-billion ceiling.

Official Washington—Forrestal, Nourse, the New Dealers—agrees that when you break through that ceiling you have got to face up to this:

A program of harsh controls over business, over materials, over labor—if only to assure an orderly handling of production, the basic, hard-goods production.

Otherwise, as they see it, the nation would be laid open to economic dislocation; even the military program would be slowed, get out of kilter, cost more.

Nourse tells Truman: Even another \$2-billion or \$3-billion more than the \$15-billion you have budgeted for the military next year will require regimentation of the economy.

He reasons that every extra dollar for guns puts another strain on steel and skilled labor—already strained to support today's economy. Even though the strain has disappeared in some soft spots, the soft spots are in soft goods, and don't help.

Even though the strain has disappeared in some lines—textiles, say—Nourse maintains that the slack there won't much help the lines that remain tight or grow tighter. Labor just doesn't migrate that fast, or that much, for one thing.

And Truman has decreed that Nourse's interpretation of the effects of any particular expenditure is the one to go by.

**YOU'RE GETTING THE INGREDIENTS** of this prospect for guns ahead of butter in bits and pieces.

The debate is over particular aspects of the problem—how to increase taxes, how much control and what kind, ways of divvying up the budget.

Reason: Although the Administration agrees on what the consequences of increased military spending will be, it is split into three camps over the issue of whether or not to prepare.

**Camp 1:** Forrestal and Marshall say that the commitments we have made around the world require what amounts to a state of limited emergency. At best they see only a long period of armed truce.

And if that's the case, they insist, we have got

to put away business-as-usual and give the government power to put this nation and the West into a defensible position.

They still talk no-war, but they're saying that the only hope for preventing war is to be prepared.

**Camp 2:** The New Dealers aren't convinced that the Pentagon can't get enough defense out of Truman's \$15-billion allotment. They think the brass should sweat off some of the fat, really settle, for instance, whether land or sea-based planes are to deliver the atom bomb.

In addition, the social planners are against any proposal that threatens to disrupt or delay their broad social program—particularly the power plants, the transmission lines, the houses, reclamation, the things that compete with guns for scarce materials and labor.

**Camp 3:** Finally, there's the Snyder crowd that says, in effect: Don't rock the boat. They don't have any enthusiasm for social-welfare schemes. And they also want to keep the lid on Pentagon spending to hold taxes down, avoid real controls.

And the conservatives argue, also, that once controls are imposed again, they will be doubly difficult to abandon when rearmament gets caught up; the "habit of controls" creates vested rights, in Washington, of course—but in priority industries too.

**TRUMAN IS LEANING**, right now, toward those in his Administration who are plugging for social progress. He's still convinced that his military ceiling can hold.

Truman fixed the \$15-billion ceiling last fall—before election—without much reference to the implications of guns or butter. It was more or less the mathematical figure that Snyder and Budget Director Webb arrived at to keep the budget in balance.

Now Truman finds it politically expedient to keep that lid on. The political fact is that the people who look to government for economic help are the people who elected Truman.

Forrestal intends to make one last attempt to swing Truman back onto the course the Pentagon contends was set last spring by the draft act and the 70-group Air Force.

Minimum price tag for this program in fiscal '50 is \$17.5-billion.

Forrestal wants to avoid a public brawl before

# WASHINGTON OUTLOOK (Continued)

congressional committees. But it probably doesn't matter much how he makes out with Truman. Congress—particularly military specialists like Rep. Carl Vinson and Sen. Millard Tydings—is in no mood to second-guess the admirals and generals.

**FIRST TEST** of the strength of the just-turned Democrat midwestern wheat-corn-hog farmer comes next week at the American Farm Bureau Federation convention, in Atlantic City.

Most wheat-corn-hog farmers line up with Secretary Brannan behind the flexible price supports of the Aiken-Hope law passed last spring by the G.O.P.

Long-time-Democratic cotton-peanut-tobacco farmers from the South want to hang onto the high, fixed guarantees, plus return to mandatory acreage controls.

You can look for the southerners at the meeting to make ammunition out of the fact that wheat growers this fall overplanted Brannan's recommended acreage by 10%.

Best sample of how sharp the feud may become will be in the voting on reelection of federation president Allan Kline. An Iowa corn-hog man, Kline wrested control last year from southern plantation owner Ed O'Neal.

**FIRST ESTIMATES OF IMPORTS** next year add up to a whopping \$8-billion. That's 12% over this year's record total of around \$7.1-billion.

The uptrend in imports will be sparked by continued recovery throughout the world. Lower U. S. tariffs are counted on to stimulate the increase.

The increase in volume of incoming goods may be even greater than the dollar increase. Import prices are leveling off, may even turn down somewhat next year.

U. S. exports in 1949 are being figured at not less than this year's \$12.5-billion, probably a little higher.

Reasons: Shipments under ECA will hit their peak next year, and there's the military lend-lease program coming along.

**FOURTH-ROUND WAGE BARGAINERS** will have in front of them a chronological tabulation, from the Bureau of Labor Statistics, of what has happened to wages before.

The reports will be made public in advance of next year's wage talks. They will be limited to a bare recitation of the cents-per-hour increases and

fringe benefits, contract by contract, as far back as contracts go in each case.

BLS will leave it to labor and management to relate the wage rates to the cost-of-living index, productivity, and whatever—to gain what advantage there is.

In all, BLS plans about 20 reports covering major plants, industries, or areas. First out will be American Woolen Co.; it will be followed by the cotton textile industry in the New Bedford-Fall River (Mass.) area.

The really big ones in the list: Chrysler, soft coal, U. S. Steel. These are the spots to watch for a fourth-round wage pattern.

**THE RUSSIANS CAN STILL AGREE** with the U. S.—where it doesn't matter, at least. Witness their ratification this week of the Far Eastern Commission's policy decision to permit traders to live in Japan, let the Japanese import raw materials.

Agreement was academic; MacArthur already had put the rules into effect, unilaterally, under his unique power as supreme boss of Japan.

But Washington noted that Russia signed up only a week after Ambassador Panyushkin had taken a snipe at MacArthur for blocking Japan's recovery.

State Dept. guess on why Russia was glad to go along: Japan's big source of raw materials is Manchuria and North China; Russia wants to make itself popular there by encouraging trade.

• Ex-WPBers in the National Security Resources Board want Truman to name as a successor to chairman Arthur Hill a man who will carry on their fight to direct any industrial mobilization. Hill quit this week, partly because he couldn't wrest that role for his agency away from Commerce Secretary Sawyer. . . .

• The new Hiss-Chambers spy sensations guarantee continuance of the House Un-American Activities Committee. The group had been earmarked for a less thunderous role in the 81st Congress. . . .

• Secretary Tobin has told his Labor Dept. staff to quit talking about new labor legislation until Truman's state-of-the-union message spells out what he wants. . . .

• Navy is sitting on a new line of super-fuels. They are being developed as rocket propellants but have commercial possibilities as additives to pep up gasoline.



## Retail Sales: Up or Down?

Stores report some recovery this month from the November slump. But not even the most optimistic expect to do much better than last year. Is it weather? High prices? Changed buying habits?

Retailers lifted their chins off the floor this week and adjusted their mouths into cautious smiles. After a dismal November, in which their sales consistently fell below last year's figures, business had begun to perk up a little.

• **Little Big Talk**—Few retailers, however, are talking of the Christmas season in the glowing "15%-better-than-last-year" terms they used a couple of months ago. Much of their talk has been scaled down to "3% better" or

"about break even." Some of it sounds strangely like whistling in the dark.

The rest of the business community is keeping a close watch on the retail picture, too. Retail sales give them a check on the economy's pulse and respiration rate. And they know that sick retail sales can easily become a drag on the general industrial boom (BW—Nov. 20'48,p19).

• **November Hurt**—The retailers have good reason for guarding their optimism

at this time. November, the month when pre-Christmas buying usually starts, failed to produce the anticipated rush to the stores. Across the nation, department store sales fell from 5% to 11% below last year's figures.

The big mail order houses felt the slump, too—to a lesser extent. Sales of Sears, Roebuck & Co. for November held about even with last year. But Montgomery Ward & Co. posted a 3.3% loss.

• **Disappointment**—The bitterest pill came after Thanksgiving. Usually the Friday and Saturday after Turkey Day bring lots of shoppers into the stores. This year, however, few customers came.

The shoppers didn't start to buy, in fact, until the middle of the week following Thanksgiving. Even this wasn't completely satisfactory to the merchants; they know that they never quite make up for the sales lost in a bad month. A man who puts off buying a topcoat until December buys an overcoat instead—and the retailer loses the chance to sell him both garments.

• **Hard Goods**—Another factor that is plaguing retailers is the slump in hard-goods sales. Big-ticket appliances, such as refrigerators and electric ranges, have slowed to a standstill in some areas. A lot of appliance retailers blame Regulation W credit controls.

• **Bright Spots**—Toy sales provide at least one bright dab in the sales picture. Several stores reported that toys were selling far better than they did last year.

Here's one surprise that is helping keep retailers' spirits up: Some soft goods—particularly women's apparel—are doing far better than expected.

One result of the generally slow sales has been an increase in the amount of department-store advertising. As yet, most of the ads merely list the merchandise on the dealer's shelves. But if the buying urge should weaken again, the ads might tell a different story—of pre-Christmas price cuts.

• **Explanations**—The retail merchants have a lot of reasons to offer for the general buying lag in November. Each store executive has his own set of ideas:

**The weather** was unseasonably warm. This kept prospective purchasers of heavy underwear, overshoes, scarves, electric heaters, and other cold-weather gear out of the stores. And it retarded development of the "Christmas spirit," which retailers regard as all-important to the season's sales.

Christmas comes on a Saturday this

year. It's an axiom in the trade, some merchants say, that a Saturday Christmas always brings delayed buying with it. Customers think they have plenty of time before the final day rolls around.

A return to prewar buying habits is under way. During the last couple of years, desirable Christmas merchandise has been in short supply; shoppers bought early to make sure they got what they wanted. This year, however—as in prewar years—there's plenty of merchandise on the shelves. The customers know it—and they're taking their time about buying it.

Consumers are waiting for lower prices. Some store heads put part of the blame for this on the November elections. They say that the public expects the Administration to bring prices down in a hurry, so buyers aren't buying until they see lower price tags.

Consumers have already seen some price reductions in men's clothing. Crawford Clothes, Inc., started it by cutting menswear prices 20% in all of its outlets (BW—Oct. 23 '48, p. 24). And last week, Goldblatt's gave Chicago consumers another taste of price-slashing: It offered all-wool suits at 33 1/3% off regular prices (picture, below).

• **Cause and Effect**—Price cuts such as these, some merchants say, whet the customer's imagination; they lead him to believe that prices of all types of goods are coming down. And, in a left-handed sort of way, that logic might pan out: If consumers don't maintain the stepped-up buying pace they set last week, worried retailers will prob-

ably start a rash of pre-Christmas sales.

In fact, even if December sales pull the 1948 Christmas season up to the 1947 level, there are going to be some cut-price sales in January. This year's larger inventories (up about 15% in dollar value over last year) make that a certainty. Department-store men are ready to slash prices to whatever figure is necessary to move the merchandise out of their stores next month.

• **Value, Not Price?**—Some department-store men, however, don't agree that consumers are interested primarily in low prices. They point to the fact that, in some areas, low-price variety stores report sales lagging even behind local department stores. If consumers were "trading down," they say, the variety stores would show a gain.

These men believe that purchasers this year are looking for value, regardless of price. If they find the type and grade of merchandise they want, they'll buy, even if the price is high. But they're going to shop around plenty to make sure they can't buy it cheaper somewhere else.

• **Hopeful**—Despite these worries, retailers are by no means discouraged. If consumers keep up the pace of last week's buying—or increase it—they think they'll at least equal last year's figures. But they fear that their sales honeymoon, during which they posted sales gains every month, may have come to an end.

"Hard times are not coming," one merchant put it, "but easy times are going."

## 1% a Month?

Finance companies say New York's proposed lid on interest rates for installment buying is too low.

Is an interest rate of 1% a month enough to finance time sales of automobiles? A New York State joint legislative committee thinks it is—but the finance companies most certainly do not.

• **Proposed Law**—The committee's job is to shape a bill that will tighten up the regulations on installment sales; the legislature will consider the bill when it meets in January. As for the finance companies, they don't oppose all regulation of sales and financing. But they are upset over the committee's proposal to limit interest rates to 1% a month.

At last week's hearings they were saying that 1% isn't enough to finance time sales of autos, particularly used ones. They even intimated that if the rate becomes law, they will go out of the used-car financing business in New York.

• **Rising Costs**—A spokesman for Commercial Credit Corp. told the committee that the cost of financing new cars has been around 1% for the past 10 years. But recently it has been rising because of higher salaries and bank rates.

As for the financing of used cars, that's even more costly. His reasons: (1) People who buy them on time default more often than people who buy new cars; (2) it's harder for the finance company to get its money back by selling the car.

• **Precedent**—The committee can cite precedent for its intended law. Two states have already set rate ceilings. But in both cases they are higher than the proposed New York rate. For example, Pennsylvania sets these maximums: New cars, 1% a month; used cars up to two years old, 1 1/2%; used cars over two years old, 2%.

The finance companies think the Pennsylvania ceilings are adequate at the present time. But in principle they don't want the states to set any rates at all. They argue that such rates are slow to follow changes in business conditions.

• **Other Suggestions**—If rates must be regulated, the finance companies say they would prefer that an administrative agency set them. That could keep rates more flexible. Actually, they maintain, competition will afford fair rates to the public. But many finance-company executives agree that there should be a New York state agency to license companies and hear complaints of installment purchasers. Several states have such agencies now.

**MEN! Get Up Early Monday for these Savings!**

**GOLDBLATT'S STATE ST. STORE**

Men's Clothing Department Opens at 8:30 A.M.

**All-Wool Worsted**

**Sale!**

**\$94,899 worth of stock to go for only \$63,259**

**SUITS**

**Only 1,626 Lucky Men Can Share in the Terrific Savings!**

**33 1/3% OFF**

Set the above clock early! Ship the second cup of coffee! Ship the first cup! Ship breakfast! But by all means, be at Goldblatt's at 8:30 for the most terrific suit sale in years! What you want—two level shoulder stripes, gavel stripes, shakle, shortshakes, suitheads, herringbones and plain colors in blue, brown, tan and grey. Single and double breasted, new drapes and conservative modelled flappers, shorts and knicker! EVERY suit has a hand-creased collar, hand-creased shoulders, hand-creased sleeves! EVERY suit has a flyme front to keep the lapels from breaking and creasing, and ensure the smooth look of flawless tailoring. Plenty of guarantees in all colors.

SALES LIKE THIS may influence buyers of other goods to hold out for lower prices



**1** Two feet of this punched paper tape carry as much information as would be handwritten on 48 Bell Telephone toll slips. Punching apparatus goes to work as call is dialed



**2** In accounting office, 250-ft. rolls of tape are run through machines which read off data at 80-digit-a-second clip.



**3** Banks of machines sort out data on thousands of calls, assembling information and making complicated calculations



**4** Finally, assembled information is automatically printed on toll slips which are sent to bookkeeping office for posting

## Machine Keeps Books

The steel fingers of mechanization are grabbing one more kind of white collar job. This week Bell Telephone Laboratories unveiled its brand-new, long-worked-on automatic message-accounting system.

This latest step in the current white-collar industrial revolution does in split seconds what it takes minutes for the fingers of a toll operator to do. Then the system will take the recorded information, assemble it in a logical order, figure the length of each call, and finally print up the data ready for posting on a subscriber's bill.

Bell Laboratories modestly says that the development is "one of the most significant advances . . . since the introduction of the dial system." But until complete time studies are made, Bell will not try to estimate the number of woman-hours that the new system will save.

The key to the system is a reel of paper tape. It's not unlike teletype tape; but it's much wider (3 in.), and the holes, which contain the coded in-

formation, are embossed, not punched through.

In a central exchange office, automatic punching machines gulp down gobs of the tape. As soon as a subscriber puts through a dial toll call (or a call on a line which is billed by the number of times it's used), the machine goes to work. The bank of automatic magnetic punches records the subscriber's number, the called number, and the time the call was answered. As soon as the subscriber hangs up, the machine records this bit of information, too. In the meantime, the tape might have recorded the beginnings of another 100 calls.

Next the tape is taken to a telephone accounting office. There the first step is to run it through an automatic reading process. This gathers together all the information for one particular call, and makes one group out of it. In doing this, 10 additional tapes are cut from the one original central-office tape. In subsequent steps, the information is further assembled, and the length of each toll call is automatically computed.

## Spotting CPA's

**Institute of Accountants develops tests to show ability and aptitude. Professional schools will give them.**

Certified Public Accountants are the men who keep the score on business. Now they are all set to keep score on themselves.

The American Institute of Accountants has spent five years and \$100,000 to develop scientific tests that will uncover specific accounting ability and temperament—or the lack of it. Up to now, this information could be gained only through costly, time-consuming, practical experience.

• **Through Colleges**—The tests will be given to accounting students by the professional schools, under general supervision of the institute. Each student, on graduating, will receive a standard scorecard—which is expected to play a big part in landing that vital first job.

Prospects for success of the program are bright. Educators have been found very willing to cooperate. And the professional accountants are taking the institute's program seriously: Some 200 of the leading firms contributed to the expenses of developing the tests; nearly 1,400 public accountants have said that they intend to give weight to the scorecards when they hire new men.

• **Unusual**—The program has several unusual features:

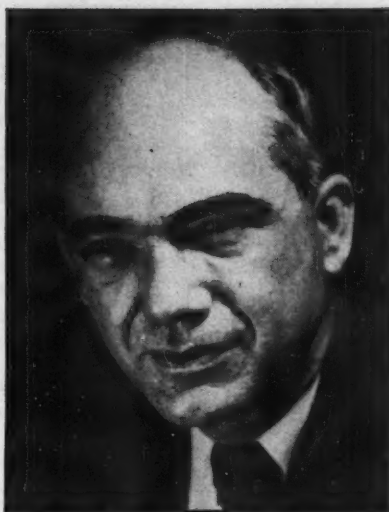
(1) If it succeeds, it will move vocational guidance from the personnel departments of private business into the educational institutions, where the accountants think it belongs.

(2) Because nationwide standards will be set up, schools, employers, and students can use a yardstick that has the same number of inches in Podunk as in Pittsburgh, in Crossroads College as in Harvard University.

(3) This is the first time that a personnel-testing program has originated and been carried through to the practical stage within the profession concerned.

• **The Tests**—There are three basic tests: an orientation test, which measures basic aptitude for accounting; a vocational-interest test, which produces a "profile" of the student in terms of his interests; an achievement test, which comes in two parts, to measure accounting knowledge at two levels.

No set pattern is prescribed for giving the tests in schools. But the orientation and vocational-interest tests will probably be given fairly early, while there is still time for an unsuited student to change his mind; Level I of the achievement test might be given at the



**CPA SEEKER:** Prof. Ben W. Wood supervised development of tests for accountants

beginning of the second year; Level II at graduation.

• **Standards**—Enough research has been done to provide basic standards and norms.

More than 1,000 practicing CPA's were tested to establish the successful practitioner's "profile" which is used as a basis of comparison in the vocational-interest test. With the cooperation of some 140 schools and colleges, more than 83,000 students were tested to arrive at the norms used in the orientation and achievement tests.

• **Test-Makers**—Development of the tests was under the immediate supervision of an educational psychologist with long experience in the field: Dr. Ben W. Wood (picture), professor of collegiate educational research at Columbia University. The Educational Records Bureau, a nonprofit test and research organization housed at Columbia, did the work.

The man at the Institute of Accountants who has sparked the project since it began is Harold R. Caffyn. He is chairman of its Committee on Selection of Personnel, and a partner in the New York CPA firm of Hurdman & Cranston.

• **Highly Accurate**—The institute does not claim that the tests are infallible. But it says that the orientation and achievement tests have been found between 90% and 96% accurate. And the vocational-interest test has been shown to be a valuable instrument in 90% of the cases studied. Further refinements of the tests are planned.

The institute wants the tests to be a routine part of college procedure for the accounting student. But the overall scope of the program is broader: It includes making tests and standards available to business, accounting firms, and other employers of accountants.

## Steel Quirk

**Open-hearth producers are making alloy steel—while electric alloy furnaces turn to carbon steel to keep busy.**

Since the war, businessmen have learned to expect many a quirk in the steel-supply picture. Last week they spotted another twist—this time on the production side.

• **Criss-Cross**—In the first 10 months of the year, production of alloy steel topped output in the same period of 1947 by about 919,000 tons. But a tickler lay behind the figures: The lion's share of the increase came from open-hearth producers—not from the electric-furnace processors who specialize in alloy production.

But that was only half the change in roles. To make the shift a complete criss-cross, the electric-furnace crowd wound up with credit for nearly half the boost in the output of carbon steel—generally a main standby of the open-hearth crew.

• **The Cause**—What caused the double switch? The American Iron & Steel Institute had one answer: It was due in the main to increased demand from people like the automakers for large heats of alloy steel. Open-hearth furnaces have the capacity to handle these big-batch runs.

That left some of the smaller electric-furnaces on the sidelines. So their operators turned to production of carbon steel. At the prices steel can get, this will still pay off even though the electric-furnace method of production is more expensive.

Electric-furnace output of ingots and steel for castings is about 1-million tons ahead of last year.

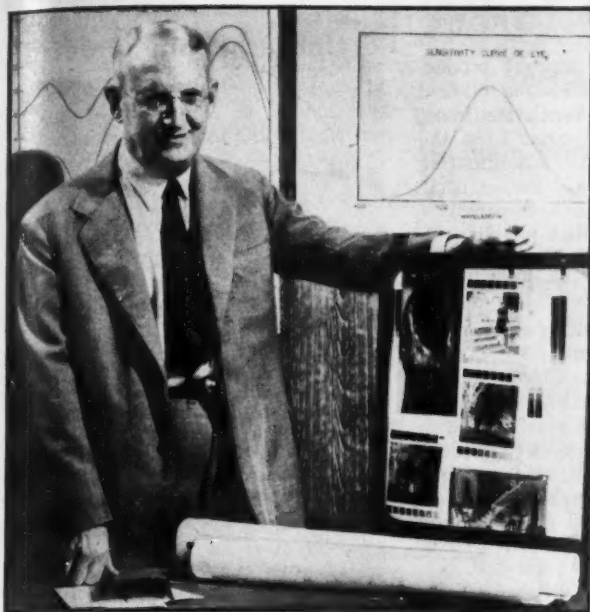
## AGED PLASTIC ON WAY OUT

Last week, in the midst of a plastics boom, it looked as though the granddaddy of them all was on its last legs. Celanese Corp. of America said it would make no more cellulose nitrate (famously known as celluloid).

Over eighty years ago, an acute shortage of ivory billiard balls led John Wesley Hyatt to develop cellulose nitrate—and start the plastic industry.

Over the past few years, cellulose nitrate has been giving ground, slowly but surely, to more efficient cellulose types—the acetates, butyrates, propionates. In 1931, the nitrate represented 90% of the total cellulose production. Last year, it was down to about 13%. It's a good bet that it will shrink still more.

Celanese rejected the material for its one bad characteristic: flammability.

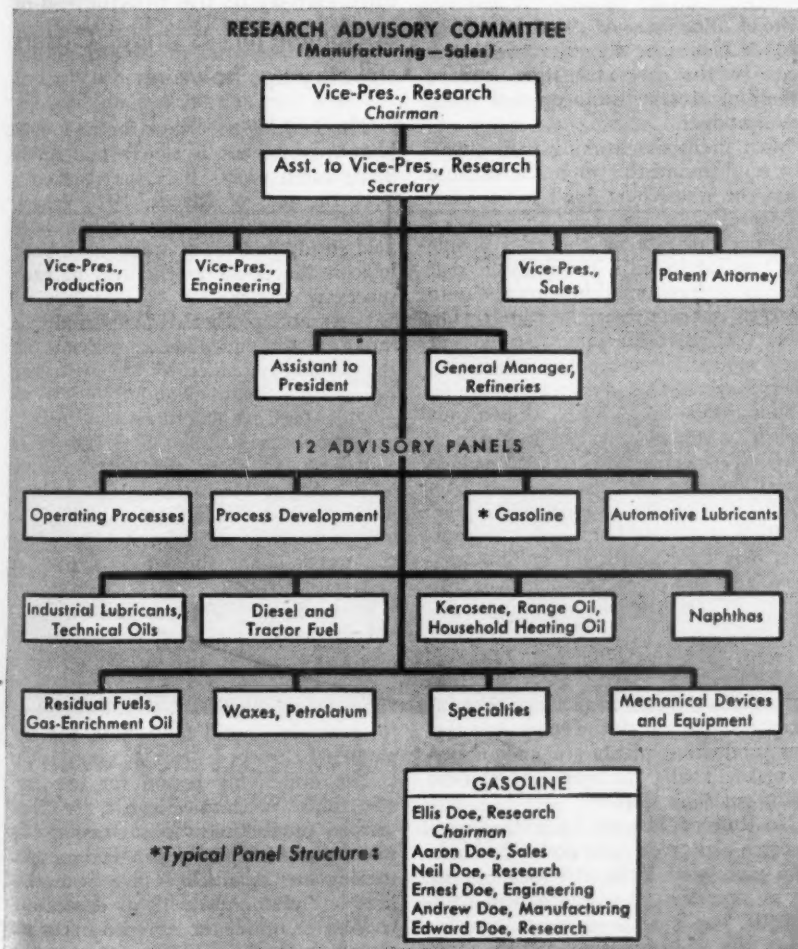


PURE SCIENTIST Mees of Eastman Kodak, and . . .



PROJECT RESEARCHER Foote of Gulf Oil point out . . .

## Two Trails to Research Achievement



You can start with a product, as Gulf does, or with broad research, as Kodak does. Either way, you can get there.

How can you get the most out of your company research? The question has a wider interest now than it has ever had before. Companies that before the war never went in for research today are hovering over the test tubes in their own laboratories; concerns that were formerly big researchers have expanded their research plant.

• **Two Approaches**—There are probably as many ways of running a research program as there are companies. But there are two main takeoff points, and in theory, at least, they are poles apart.

**YOU CAN START WITH THE PRODUCT** you make and market, tie in your research with every step of production and selling.

**YOU CAN START IN AN IVORY TOWER**, reach from it into the regions of pure science, and come up with a product.

Actually, you can't draw a heavy dividing line between the two techniques. There's no such thing as operating in a pure vacuum. Research bears a direct relation to the success of a business. As one top-level research man put it, "Competition begins in the laboratory."

• **Case Studies**—Still there's a distinction. This becomes clear from the way research has been handled successfully by two concerns: Gulf Research & Development Co., a subsidiary of Gulf Oil

GULF OIL sets up its research organization this way. Advisory committee has final voice

Corp., at Pittsburgh, and Eastman Kodak Co., at Rochester, N. Y.

At Gulf, research starts at production grass-roots. Every project gets a thorough going-over before it ever reaches the laboratory. There's a tight liaison between all departments of the company, on the ground level.

• **Gulf Setup**—Here's how Gulf has set up its research program.

To begin with, Gulf Oil is a network of subsidiaries, each with its own area of operation. Research and Development is one of these subsidiaries.

All research projects come under the eye of two committees, one dealing with problems relating to manufacturing and sales, the other with production problems (finding oil, getting it out of the ground). The general research program is split about 50-50 between the two committees.

The final word on manufacturing and sales research projects comes from a Research Advisory Committee, headed by Dr. Paul D. Foote, vice-president. Members are top-level managers, and vice-presidents representing sales, manufacturing, engineering, and advertising and promotion. These men, Dr. Foote believes, are high enough on the executive ladder to see the company operations as an over-all picture. But besides their departmental work, they must put in considerable time for the committee—at least one full day a month, sometimes more.

• **Technical Panels**—Raw material for the committee to work over comes from 12 technical advisory panels (chart). Only, by the time the panels have passed on the material, it is no longer really raw. Panel members are drawn from a cross-section of operating men—representing the research, sales and advertising, manufacturing, and production or engineering sections. Before they refer a product to the advisory committee for approval or rejection, they have batted it around from every angle; each representative has his say on how he thinks it will work from the point of view of his section.

Dr. Foote explained it to BUSINESS WEEK this way: "Our scheme is to draw the men who know their stuff into the general research program as advisers, regardless of where they're located." Gulf men are brought into the technical panels from all parts of the Gulf Empire.

• **Advantages**—Dr. Foote feels that this system flattens out one obstacle right at the start. Any opposition to a project is licked before research is under way. You're not ramming anything down the company's throat; you get advice and cooperation all along the way.

There's another very real advantage. You don't waste time on the development of products that aren't practical to make, and sell. In one Gulf research project, involving a heavy cost outside

the regular budget, nearly 100 men participated.

• **Field Research**—On straight production problems—those involving oil-field research—the setup is much the same, only the top decisions come from the Production Research Coordinating Committee. This group, too, is backstopped by technical advisory panels.

Gulf men observe that panel members act on their own. No immediate superior tells them what they can or can't say.

• **Kodak's Setup**—If Gulf research starts in the ground, where the oil is, Kodak starts in something that approaches the ivory tower. That's partly because of the peculiar nature of Kodak's business. Dr. C. E. Kenneth Mees, vice-president and director of research, told BUSINESS WEEK that any company's approach to research varies with staff personnel and the organization of the company's facilities. Thus, Kodak is so large that each manufacturing unit has its own laboratory to handle development research.

Basic fact behind Kodak's approach is this: No university does any basic research in the theory of photography. Kodak has to do this for itself—or else employ industrial laboratories or private concerns to do it.

• **Broad Province**—At Kodak, whole fields of science are the researchers' province. In the course of their studies, something usually turns up that looks like a product.

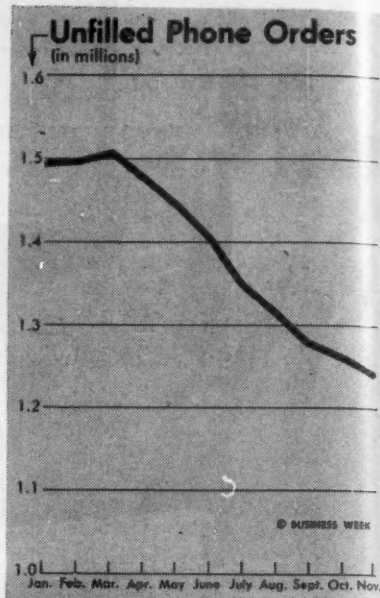
Most industries working with chemistry tend toward this approach, because often the researchers don't know what they want.

Under this system, the sales people aren't called in until the research staff believes it has something for them to market. But the researchers know, Dr. Mees said, that the sales staff doesn't want products that are too radical, because they can't see a market for them.

• **Similarities**—Still, Mees thinks, it's foolish to present the two methods as mutually exclusive. For instance, in special fields of photography, Kodak research and sales personnel hold joint monthly meetings. These meetings consider developments in the graphic arts, color, and X-ray. A Research & Development Committee handles these special fields.

Sometimes, too, Dr. Mees, turns his laboratory into a partial production unit. He's likely to do this especially on a new product which the company's regular production plants are unequipped to make. That's the way Kodachrome prints got their start.

• **No Rule of Thumb**—In setting up a research plant, you can't go by the book. You pick what looks like the best bet for an operation of your size and kind. Usually, you'll wind up somewhere between the project method and the pure-science approach.



## Bell Catches Up

Backlogs for new phones eaten away as the production of equipment hits its stride. Orders still stay up, however.

The backlog of orders for new telephone equipment is slowly but surely being eaten away. Backlogs reached a peak the first of March, 1948 (chart, above). Since then, new orders have held steady, but fewer orders have been left on the books at the end of each successive month.

Last week, another sign appeared that indicated the end of fierce pressure on the phone companies: Western Electric Co., American Telephone & Telegraph's big manufacturing subsidiary, revealed that it had laid off 300 workers at its vast Hawthorn plant in Chicago. The number (less than 1% of the plant's total work force of 32,000) was not particularly significant in itself. But the fact remains the layoffs were the first since V-J Day.

• **Some Trims**—Western Electric people denied that the layoffs meant overall production had finally caught up with itself. They said it had caught up only "in some categories." Cable output, for example, is still far behind the demand.

The underlying reason for the layoffs, said Western Electric, is that worker productivity is increasing; in many departments, four workers are turning out as much as five were this time last year. And with its decreasing backlog in mind, the company sees no reason to "build out" (i.e. increase the capacity of) any of its manufacturing de-

partments at this time. That adds up to smaller labor demand.

• **"Sustained Demand"**—All in all, the Bell System is still in a period of "sustained high demand." Consequently officials say that A.T. & T. has not trimmed any equipment orders to Western Electric.

Month-by-month figures of new subscriber orders underline this. In October, 1948, operating subsidiaries of Mother Bell put 445,000 new orders on their books. This figure was above the monthly average for the June-October period (435,600), and even farther above the average for the same period of 1947 (423,000).

Neither has there been any increase in the number of cancellations of orders for new installations. (Bell calls this "melt.") In October, 1948, there were 61,500 "melts" recorded—less than during any other month since June, with the single exception of August, when melts dropped on Bell's books to an unseasonable low of 47,000. And the 1948 June-October average (60,400) was computed well below the average shown for the same period in 1947 (91,600).

• **Warning**—So, Bell warned, the drop in the backlog and the slight trim in production does not mean that new telephone equipment for those still on waiting lists will be installed next week. And when home and office installations will really be back to a normal week-to-week basis, A.T. & T. will not hazard a guess.

## What Holds Prefabs Back

Merchandising and financing are the big problems, say the manufacturers; they could build three times as many if they could sell them. Harman Co. is the latest to give up the struggle.

Marketing, not production, is the prefabricated industry's real bottleneck in the sales picture today.

This year, some 40,000 prefabricated dwellings will be erected—only about 5% of 1948's 800,000 detached houses. If it weren't for that bottleneck the prefabricated builders could turn out three times the 40,000.

Even the most successful prefabricators have had to throttle production to fit sales. Consumer acceptance isn't the rub: Prefab builders say the public would buy the houses if they could get them.

Half of the problem is to contact reliable, responsible, well-heeled local distributors and dealers. The other half is financing—which has been plaguing dealers both in making sales and in carrying the houses through the erection period.

• **Bankrupt**—The bankruptcy of the William H. Harman Co., of Wilmington, Del., points the moral. Harman's steel house was well-engineered and attractively designed. The company says people were ready and willing to buy it. The outfit was soundly conceived and strongly backed; with another product,

it would probably still be in business. But not with houses.

In its bankruptcy petition, Harman said: "We attribute the company's failure to its inability to overcome the complexities of distribution and the difficulties of financing sales and erection."

• **Many Failures**—High company mortality has been characteristic of the prefabricated business through the years. Inadequate financing has perhaps killed off more companies than anything else. But merchandising trouble follows close behind. And many well-heeled companies have given up prefabricating because they could make better profits with fewer headaches in other lines.

For example, Tennessee Coal, Iron & Railroad Co. (a U. S. Steel Corp. subsidiary) tested the possibilities of the prefabricated field early in the game; it withdrew back in the 30's. Builders of industrial metal buildings have similarly tried the housing market.

• **Young Industry**—Some 80 companies are producing prefabricated houses today. Not more than two or three of them have been in the business since before the depression. The lean years of the 30's brought forth the first real efforts to revive the housing market by using the economies of factory techniques. Most of the experimenters succumbed, to high development costs or to sluggish sales. A few, however, had enough cash and enough faith in the future of the business to put it on the line.

War—with its government contracts for temporary housing—attracted some sizable prefabricated recruits. But most of these viewed the field solely as a temporary sideline, and never had any intention of going into competitive prefabricating. Not more than a half-dozen of them are still active.

• **Postwar**—Right after the war, the government's emergency housing program—the Wyatt Program—was set up. Optimists thought its promise of financial backing and priorities would be a tremendous boost for prefabs. Nearly 300 made motions toward crawling in under Wyatt's guaranteed-market tent. The majority were fly-by-nights that never got beyond the paper stage.

The Truman administration lost interest in the program before it was well started. RFC finally made market-guarantee or loan agreements with only 32 companies. Several of these have gone bankrupt; others have stopped producing. Only six are prefabricating today.

But aside from the Wyatt Program,



### Willow Run: From WAA to K-F.

Last week Kaiser-Frazer Corp. added 320 manufacturing acres to its budding empire. It bought the huge (4.5-million sq. ft.) ex-bomber plant at Willow Run, Mich., from War Assets Administration. K-F., which clearly expects to be around a long time in the auto industry, chose to buy even though it holds a lease with option to occupy the

plant until 1965. Purchase installments will amount to little more than the present rental. The plant went to K-F. for \$15.1-million. A \$1,510,000 down payment will be followed by 20 annual installments. K-F. is sure it got a bargain; equipped, Willow Run cost the government around \$100-million.

postwar demand itself has opened the door to expansion of the prefab industry. At least 15 already established companies continued to build and sell houses without benefit of market-guarantee or loan agreements. In addition, twenty-odd prefab producers—who are doing a promising business today—started making houses in 1946; a half-dozen more going companies joined them in 1947.

• **Metal**—Of the 80 companies who are building prefabs today, only five make steel houses. (There were six, before Harman quit.) Present output is small; the five are hoping for volume production when they can get the steel. None of the five has yet built enough houses to test its merchandising ability.

Last week Lustron Corp., giant of the group, was awarded a Navy contract for 60 houses to be erected within 240 days at Quantico, Va. Housing men are studying the significance of the fact that Lustron, with its metal house, was able to outbid six conventional-prefab builders on the basis of lowest cost per square foot of usable space.

• **Wood**—This year's production of 40,000 houses is almost entirely in wood prefabs. About 75 companies turn out the houses. Their total capital investment in plant and inventory is estimated at \$70-million. Most of the companies are small; relatively few have plant and inventory exceeding \$1-million.

Production of one house a day is average for the smaller plants. Only the largest producers have schedules of 10 to 15 a day.

The relatively successful prefabbers have met the merchandising problem in several ways. Most of them operate through dealer-erectors; these are selected on the basis of previous building experience and sound financial and community standing. Others utilize established local distributors of lumber and building materials. A few—especially those selling houses to builders of large projects—employ sales agents.

• **Roads to Success**—Four of the older prefabbers in this young industry have built their businesses on four different plans.

**National Homes Corp.**, of Lafayette, Ind., under the leadership of James R. Price, has become one of the most successful prefab companies. It sells through dealers who are both good salesmen and skilled erectors. National has recently set up an acceptance corporation to help dealers finance the sale of houses. The plan is similar in some respects to the financing methods of the auto manufacturers; it takes care of the dealer during the period of house erection, until the property is ready for the permanent mortgage. It will aid volume distribution of the company's new low-cost house that brings the price of completed resi-

dence property within the \$6,000 range (BW—Nov. 27 '48, p19).

**Gunnison Homes, Inc.**, of New Albany, Ind., has gone a different route. Starting in the depression, Foster Gunnison—primarily a merchandiser, and not a house builder or designer—developed the company into a successful manufacturer of wood prefabs using stressed-skin plywood panels. Now he has sold a 70% interest in it to U. S. Steel Corp. By buying the business, U. S. Steel—which is doing a lot of research work on prefab housing—is in a position to learn where steel can profitably be incorporated in the package.

**Pease Woodwork Co.**, of Cincinnati, came into prefabbing through the side door. After years of success in the mail-order millwork business, selling everything from a single item to a complete bill of materials, the four Pease brothers, headed by James L., became interested during the depression in the economies of prefabs. They rebuilt a plant at Hamilton, Ohio, and set up a dealer organization of aggressive builders within 300 miles or so to sell and erect their houses.

**American Houses, Inc.**, of New York, got off to a good start in the early 30's with ample financial resources behind it. John Taylor, Jr., its leading spirit, has always been a bear for economical, efficient methods and good fiscal management. The company now operates two plants: at Allentown, Pa., and Cookeville, Ga. It has resolved its merchandising problem by concentrating



## Top Management Man

The men who tell management men how to manage their businesses met last week in New York City. At the annual session, the Assn. of Consulting Management Engineers, Inc., elected Edwin O. Griffenhagen (above) as president. He is senior partner in Griffenhagen & Associates, New York.

on selling its houses to large, development-type builders.

Postwar opportunity has brought promising new producers into the prefab field. Among the lusty newcomers are the Knox, Crawford, and John A. Johnson firms.

**Knox Corp.** At Thomson, Ga., the four Knox boys have for years been successful lumber manufacturers and conventional builders. Near the close of the war, they went into prefabbing, building a large, modern plant for the job. Now their Knox Corp. sells its houses through dealer-erectors within 400 mi. It has solved its financing problems by selling the merits of the corporation and of quality prefab housing to local businessmen's groups in that 400-mi. area.

**Crawford Corp.** At Baton Rouge, La., W. Hamilton Crawford was a successful builder of conventional houses. He got his first crack at prefabbing during the war. He built several war-housing jobs, and took one of the first contracts for houses to go to Britain. When lumber was tight, his Crawford Corp. bought its own mill to assure its supply for houses. Its prefab plant in the city has burst its seams several times. Crawford sells the houses nation-wide, through dealer-erectors.

**Johnson Quality Homes, Inc.** The John A. Johnson Contracting Co., of Brooklyn, got its first taste of prefabs during the war, through field-prefabrication on war projects, and construction of prefab houses for overseas shipment. It liked it well enough to set up a prefab subsidiary. Johnson inaugurated its sales campaign in January, 1946, with displays of full-scale models in Wanamaker's New York and Philadelphia stores. With Ed and George Johnson as the moving spirits, the outfit maintains flexibility in distribution; it sells both through dealers, and through direct representatives who aim to corral large projects. The company operates three plants: at Pemberton, N. J.; Johnson City, Tenn.; and Atlanta, Ga.

• **Smaller Firms**—Most prefabbers operate on a smaller scale. A leader among these is William B. F. Hall, who sparks a postwar prefab outfit at Fort Wayne, Ind.: General Industries, Inc.

In the 1930's, Hall (then trust officer of an insurance company), with a partner, built houses to rent for \$2.50 a week. Since the war, he has put his energies into prefabbing. Selling through dealers, his company is marketing a house that can sell for \$6,315, including land. Because of his mortgage experience in his insurance days, Hall is able to assure his dealers of expert help in placing mortgages. Along with others in the prefab business, he is out to demonstrate that the prefab producer can both meet the need for low-cost houses and whip the financing problem.



# Pathway to Peace

Peace is many things. It is the harmony of nations, the unity of peoples, the comfort of a home—the quiet beauty of a country church at Christmas time.

An intrinsic part of peace is industry. For in industry lie the potent seeds of progress, the hope of prosperity, the way to better living.

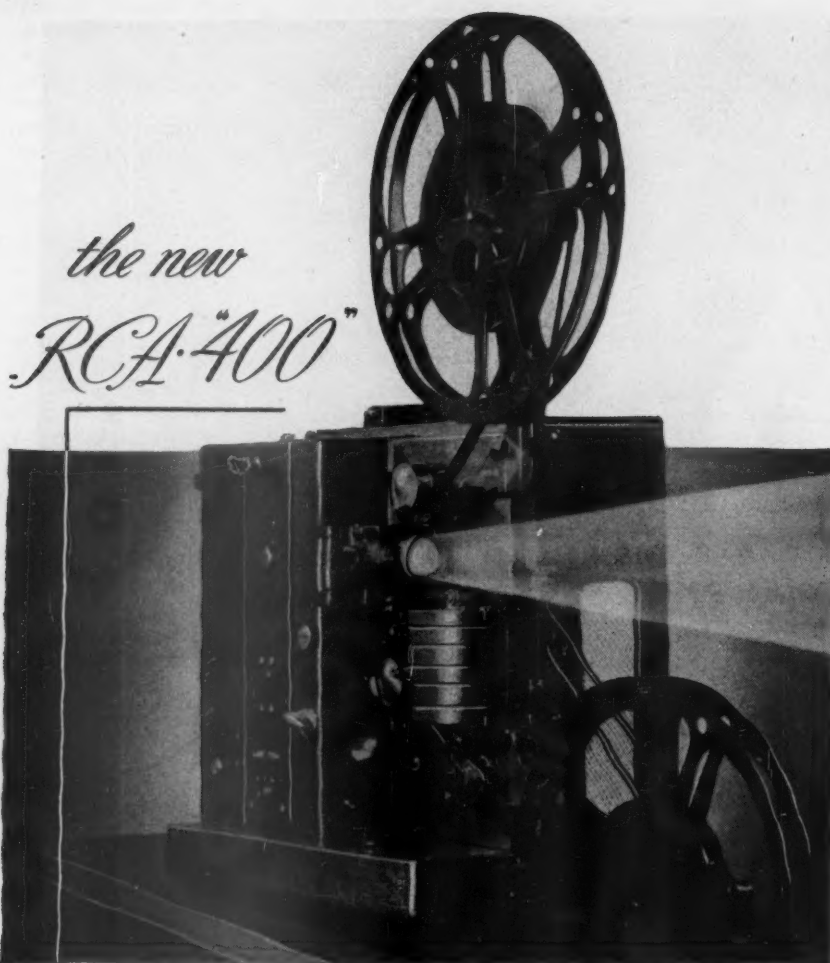
We always endeavor to contribute,

to the best of our ability, to these ends. ●

To you, our customers and friends, we extend our good wishes this Christmas time. We shall appreciate your continued patience and understanding during the coming year. And, together, may we make our small contribution toward the pathway of peace.

JOSEPH T. RYERSON & SON, Inc.

## RYERSON STEEL



*the new*  
**RCA "400"**

## Increases the value and enjoyment of your 16mm Sound Motion Pictures

• The theatre-quality projection of the RCA "400" brings you a more profitable return on your investment in 16mm sound motion pictures. Screenings of films for product promotion . . . sales and service training . . . public relations . . . employee indoctrination and training are enjoyed more, remembered longer, when projected with the RCA "400".

### *Brighter Pictures!*

#### *... Better Sound!*

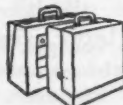
Pictures have greater brilliance, contrast and definition—in black-and-white or color. Voices, music and sound effects are reproduced with the life-like realism and

natural tone shadings that audiences enjoy.

### *Easier Operation!*

The RCA "400" is the easiest and quickest of all 16mm projectors to thread. Silent or sound film projection by merely turning a knob. Here's a lighter weight projector, easily portable for use in business, school, church, club, or in the home.

SEE IT . . . HEAR IT! Compare the RCA "400" feature for feature with any other 16mm projector. Judge it by a *proof-test* with your own sound films. For illustrated brochure and name of nearest dealer, write: Sound and Visual Products, Dept. 16L-V, RCA, Camden, N. J.



FIRST IN SOUND...FINEST IN PROJECTION



SOUND AND VISUAL PRODUCTS  
**RADIO CORPORATION of AMERICA**  
ENGINEERING PRODUCTS DEPARTMENT, CAMDEN, N.J.

In Canada: RCA VICTOR Company Limited, Montreal

## BUSINESS BRIEFS

U. S. population is now about 147,280,000, greater by 15,500,000 than it was in 1940. But this year's increase is less than 1947's.

New York City's piers may be taken over by the Port of New York Authority after all. Its \$114-million rehabilitation program (BW-May29'48,p40) recently lost out to a city-backed plan. Irked by waterfront racketeering, Mayor O'Dwyer has now asked the Authority to resubmit its plan.

Pan American is dickering for American Overseas Airlines. If American Airlines lets its subsidiary go—with CAB approval—Pan Am will (1) be far and away the largest international airline in the world; (2) have only one other U. S. competitor (T.W.A.) in the field.

Steep Rock Iron Mines has a \$5-million loan from the Ex-Im Bank to step up its high-grade ore exports from Ontario to the U. S. and RFC is adjusting the terms of its \$5-million wartime loan to the Cyrus Eaton mining operation.

Return of delivered pricing is the aim of a new National Competition Committee. Has eight chapters to work on legislators, hopes for 25. The Pittsburgh businessmen who started it have retained registered lobbyist Ketchum, Inc.

Washington state hasn't the power to take over the ferry system of Pudget Sound Navigation (BW-Sep.18'48,p41) under present laws, says the state supreme court. The line now promises plans for improved operation "under private ownership."

Reshuffling steel plant: Royal Industrial bought Whitney Steel, the Indianapolis plant that Kaiser-Frazer recently let go.

Shortage of TV viewing tubes has spurred Zenith Radio to buy Rauland Corp. Zenith will double the tube maker's capacity.

Georgia bought the \$6-million Savannah Quartermaster Depot for \$808,100 as the nucleus for a state port. Will borrow \$3-million on it for development.

The drive by Austin, Texas, to attract industry is paying off (BW-Oct.16'48,p41). Jefferson Chemical (owned by The Texas Co. and American Cyanamid) will consolidate its research there.

Du Pont paid \$13.2-million for the RFC's Louisville synthetic rubber plant.



Christmas children of all ages welcome the warm glint of the mellow, golden-yellow metal.

And for all last-minute shoppers (as who isn't?), here's one thing it pays to remember:

All gifts made of Brass . . . toys, pens, pencils, lighters, razors, shavers, compacts, lipsticks, costume

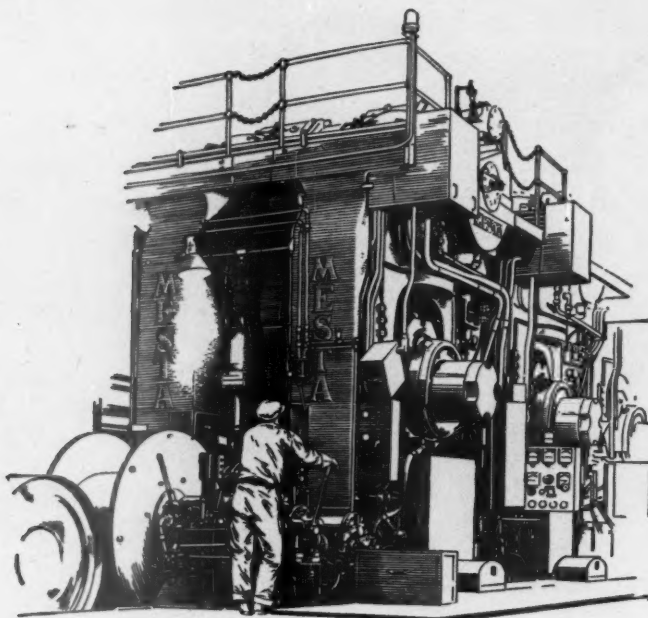
jewelry, lamps and other household "grace notes" . . . all are economical to buy. And all are of a quality you can bank on, to make the pleasure of your gift last a long time for the lucky person who gets it.

Yes, Brass in any form makes a solid and thrifty gift . . . one that says *sincerely*: "Merry Christmas!"

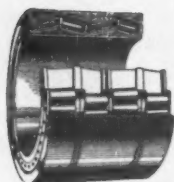
THE  
**BRISTOL BRASS**  
CORPORATION

*Makers of Brass since 1850, Bristol, Connecticut*

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## "Steel Strip Special" Rolls More Than a Mile a Minute on Torrington Bearings



Steel strip rolled by the new Jones & Laughlin five stand tandem cold strip mill, designed, built and installed by Mesta Machine Company, is something special. That's because steel quality improves with faster rolling—and this mill is the world's speediest, making up to 6250 feet per minute.

High speeds and tremendous working pressures call for top anti-friction bearing performance—delivered by high capacity Torrington four-row Tapered Roller Bearings on work rolls, Torrington Thrust Bearings on screwdowns, and Torrington single and double-row Tapered Roller Bearings on the tension reel.

For dependable operation and long service life, leading builders and operators of heavy-duty equipment rely on Torrington Bearings. Consult our engineers; they can bring years of experience in bearing design, construction and application to your friction problems.

THE TORRINGTON COMPANY  
South Bend 21, Ind. • Torrington, Conn.  
District Offices and Distributors in Principal Cities

**TORRINGTON** **TAPERED ROLLER** **BEARINGS**

Spherical Roller • Tapered Roller • Straight Roller • Needle • Ball • Needle Rollers

## Plan for Stability

C.E.D. statement makes suggestion of fiscal program to smooth out boom-bust cycle. The main idea is stable tax rate.

The Committee for Economic Development has produced another piece of homework for businessmen to study. This week, its research and policy committee brought out a statement on "Monetary and Fiscal Policy for Greater Economic Stability."

• **Boom-Bust Cure Sought**—C.E.D. is a nonprofit organization of businessmen and educators. Its self-imposed assignment is to find ways to modify the boom-bust cycle that always has plagued business in this country.

In its latest statement, C.E.D. lays out a set of general guides to monetary and fiscal action. The principles apply to the immediate inflation problem, but they are not specifically tailored to it. The idea is to set up a long-run program.

• **Tax Plan**—The mainspring of C.E.D.'s program is the "stabilizing" budget policy that it recommended in its statement on taxes a year ago (BW—Nov. 15 '47, p. 26). Under this plan, tax rates would be fixed at a level designed to yield a moderate surplus when national income and employment were high. Thereafter, tax rates would remain constant regardless of whether national income went up or down. In boom times, the rate structure would yield large surpluses. In depression the budget would show deficits.

This policy, C.E.D. argues, would make the federal budget an automatic stabilizer.

• **Other Steps**—C.E.D. recommends four other measures to curb inflation:

**FEDERAL RESERVE ACTION** to tighten credit. The research and policy committee is careful not to get involved in the current fight over the Reserve System's policy of supporting the government bond market. But it does say that "general economic stability" should have priority.

**USE OF THE GOVERNMENT SURPLUS** to retire bank-held debt.

**REFUNDING GOVERNMENT DEBT** in ways that will reduce the portion held by the commercial banks.

**A CUT IN THE VOLUME** of government loans and guarantees of loans.

In deflationary times, all these policies could be reversed.

• **Commission Asked**—In addition, C.E.D. urges that a temporary commission be set up to study possible improvements in the country's monetary and financial structure.

# MARKETING



A LUMBER YARD becomes a bonded warehouse; so does an . . .



OFFICE SAFE, when you need . . .

## A Warehouse in Your Own Plant

Need to finance rising inventories increases use of field warehousing. It provides collateral banks like.

There are two ways in which inventories can build up: by design or by accident. In either case, they've got to be paid for somehow.

• **Financing Problem**—During the war, the problem of financing inventories was minor-league stuff. Consumer goods were scarce; practically anything that wasn't bait for the consumer was being produced for the war effort. Turnover of both kinds of goods was rapid. Both merchant and manufacturer got their money back fast enough to pay their commitments.

Since the war, however, some products (radios, for example) have been having their own private little recessions in the midst of the general boom. Others, while still selling at levels above prewar, have slowed down—compared to their sales records in 1947 and early 1948. Result: An increasing number of merchants and manufacturers have been feeling a working-capital pinch.

• **Service**—Because of this cash squeeze, a complex business known as "field warehousing" has gained sudden importance for marketing men. More and more companies are looking at this specialized warehousing service as a way to build up their inventories and still hold onto their working capital.

Field warehousing isn't new. It has been going on for about 30 years (BW—Mar. 28 '36, p. 16). But it's in for a boom next year, if the predictions of the field

warehousemen themselves are correct.

• **What It Is**—The best way to get an idea of what field warehousing is is to take a look at how it works in practice. The toy business provides a good example.

The business has a strong seasonal factor; the bulk of sales are made for the Christmas trade. Therefore, the toymaker has to build up a sizable pre-Christmas inventory to supply the retail stores who buy from him. This can be tough if he doesn't have plenty of working capital.

• **Banks Are Cautious**—The best solution to the toymaker's problem is to borrow on his inventory. But banks lending money on inventory prefer to have it stored in a bonded warehouse, which can issue standard warehouse receipts to serve as collateral for the loan.

This means that the toymaker has to ship his inventory to the nearest public warehouse. That costs money: both for storage and for handling and transportation.

• **Solution**—So, instead of making this kind of deal, the toymaker takes his problem to a field warehousing company. It surveys his premises, looks over his storage facilities. The toymaker has, say, a three-story building next to his factory where he stores his inventory.

The warehouse company leases two of the three floors from the toymaker

for a nominal sum. Then it tacks up signs inside and out, showing that these two floors are now a bonded warehouse under its control.

• **Back to the Bank**—The warehousing company issues receipts on the merchandise stored in its warehouse-within-a-warehouse. The toymaker offers these to the bank as collateral for a loan. And the bank is now much more likely to accept them, because the requirement of storage in a bonded warehouse has been met.

When the toy manufacturer gets an order from a department store, he buys back one of his warehouse receipts from the bank. This entitles him to remove a certain quantity of toys from the field warehouse to fill the order. The field-warehousing arrangement enables him to draw out only as much merchandise as he can sell immediately. Thus, he can draw his stocks out of storage—and out of hock—as he needs them.

• **Wide Field**—Manufacturers with seasonal problems aren't the only users of field warehousing. Some cash-short manufacturers may want to buy raw materials in large quantities—to take advantage of quantity discounts, or of a bargain offer. Or a manufacturer may want to build up an inventory of raw materials in order to plan his production schedules more efficiently.

Distributors, too, may find reasons for using field warehousing. One liquor distributor, for example, was offered a franchise that would double his yearly sales volume. But it meant that he had to carry twice as big an inventory. By

**C**ERTAIN plastics applications call for a given property, or a given combination of properties, in greater degree than is available in general-purpose materials. Because Durez plastics are chemically compounded phenolic materials, they permit structural manipulations which make them extremely versatile. These illustrations suggest how the simplicity and economy of molding with Durez are being extended to special applications.

Quite often a discussion between the design engineer, the molder, and the Durez field man has produced ideas that improve products, reduce costs, and add new sales appeal. Besides our long experience in helping to solve plastics problems, we offer you today the advantages of greatly increased output and perfected control of uniformity. If you'd like to see what other manufacturers are accomplishing with Durez, let us send you "Durez Plastics News" each month. Durez Plastics & Chemicals, Inc., 4012 Walck Road, North Tonawanda, N. Y.

Export Agents: Omni Products Corp., 460 Fourth Avenue, New York 16, N. Y.

## For UNUSUAL plastics problems Durez has

## special properties

**RAYON SPINNING.** Heart of the machine that manufactures synthetic rayon from viscose is this thread-advancing reel. Operating under continuous tension, the Durez reel is unaffected by water, acid, desulphurizing liquid, bleaching solution, oil, or heat. Reel's fingers retain satin-smooth finish after years of operation.

**HARSH ACIDS.** Molded of another special-property Durez, these acid pump impeller parts can be machined, sanded, buffed. Chemical resistance enables the parts to give long service without corrosion.

**HOT COFFEE.** Like the glass bowl of the Cory coffee brewer, heat-resistant Durez plastic cover is chemically inert to boiling water infused with coffee, leaves the beverage flavor uncontaminated. Easy to clean . . . cool to touch . . . attractively modern. Note other Durez parts.

**STEAM VAPOR.** Durez housing of the DeVilbiss Electric Steam Vaporizer is resistant to alcohol and chemicals in medicinal spray, as well as to heat. Additional properties of the compound . . . moisture resistance and self-insulation . . . are also useful here.



RAYON SPINNING



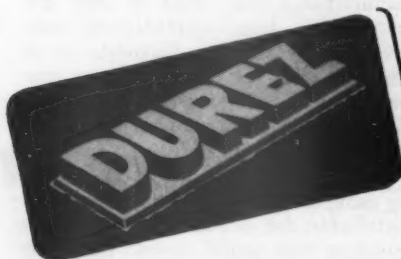
HARSH ACIDS



HOT COFFEE



STEAM VAPOR



**PHENOLIC PLASTICS THAT FIT THE JOB**

setting up a field warehouse, he was able to carry the stocks required.

• **Untypical Examples**—Field warehousing has extended to plenty of strange commodities. For instance, American Express Field Warehousing Corp. (subsidiary of American Express Co.) has made a bonded warehouse out of a desk drawer. Watchsprings were the commodity stored in this unique warehouse.

The company ran into a problem when it warehoused some cattle in a feeder pen. One of the cows dropped a calf—and nobody was quite sure to whom it belonged. It was finally decided that the calf represented additional collateral for the loan advanced by the bank; as such, it went to the borrower when he repaid the loan.

• **Charges**—The cost of field warehousing varies—usually according to the amount of merchandise warehoused. The charge usually includes a minimum annual amount for installing the warehouse, plus a specified percentage of the value of the deposits or the amount of credit secured by the borrower. On a small operation, the total cost may amount to as much as 2% of the principal of the loan; larger warehousing operations may bring it below 1% of the loan figure.

• **Drive for Acceptance**—Companies in the field realize that many marketing men—and many bankers, too—either don't understand or have never even heard of their operations. In 1941, the National Bureau of Economic Research made a survey to find out how many bankers made loans on a field-warehousing basis. Only 13% of them did.

This week, in an effort to increase this percentage, American Express Field Warehousing Corp. sent out some 14,000 letters to banks all over the country. It wants to let the banks know (1) that field warehousing can mean new business for them; and (2) that it is in the field-warehousing business.

• **Regular Warehouses, Too**—Many of the companies in field warehousing combine this function with the operation of regular public warehousing. Others limit themselves to field warehousing alone. Only a few operate on a national scale.

By far the largest, in point of volume, is Lawrence Warehouse Co., of San Francisco. It started public warehousing in 1913; added field warehousing in 1918. By 1927, it was doing field warehousing exclusively.

Some of the other companies in the field: Douglas-Guardian Warehouse Corp., New Orleans; St. Paul Terminal Warehouse Co., St. Paul, and its subsidiary, New York Terminal Warehouse Co.; St. Louis Terminal Warehouse Co.; Banks Warehouse Co., Chicago; Tidewater Field Warehouses, Inc., Philadelphia.

# 4 Every Minute



TOCCO-Hardening Pitman arms. Photo courtesy Kaiser-Frazer Corporation.

## with TOCCO\* Induction Heating

Your product may bear no resemblance to the steering gear Pitman arm shown here, but if it has to be hardened, annealed, brazed, soldered or forged, TOCCO can probably brighten your production picture, too—saving you time and money.

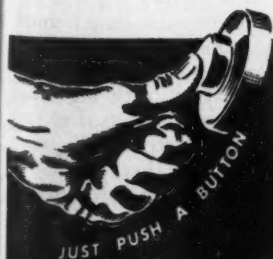
● Progressive engineers at The Kaiser-Frazer Willow Run plant have adopted speedy automatic TOCCO Induction Heating for surface hardening Pitman arms. The ball end is heated to 1600° F. in seven seconds—then quenched automatically for 4 seconds. The operation is fast, neat, fool-proof.

Material is S.A.E. 1045 steel, forged. Balls are hardened to 55-60 R.C., to a uniform depth of  $\frac{1}{4}$ ". The remainder of the part is unaffected—retains

its original ductile structure. Automatic TOCCO assures that metallurgical results are identical, every part the same, one or a million.

In your search for sound ways to reduce costs, speed production and improve your product, don't overlook TOCCO Induction Heating. Our engineers are ready to survey your plant, without obligation, of course, to determine where TOCCO can pay you a handsome profit.

**THE OHIO CRANKSHAFT COMPANY**



# TOCCO

**NEW FREE BULLETIN**

Mail Coupon Today

THE OHIO CRANKSHAFT CO.  
Dept W-12, Cleveland 1, Ohio

Please send copy of "Typical Results of TOCCO Induction Hardening and Heat Treating".

Name

Position

Company

Address

City  Zone  State

## HOW TO GET THE LOW-DOWN on Upstate New York

If you need facts and figures on upstate New York business, call on the Marine Midland Trust Company of New York. The officers of the affiliated Marine Midland Banks in 47 New York State business centers have accurate, on-the-spot knowledge of the local business conditions. Their day-in, day-out business and social contacts can be profitable to you in many ways. We'll be glad to put you in touch with them!

### Marine Midland Banks serve...

Buffalo	Jamestown
New York City	Johnson City
	Lackawanna
Adams	Lockport
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Alexandria Bay	Medina
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Attica	Niagara Falls
Avon	North Tonawanda
Batavia	Nyack
Binghamton	Oswego
Copenhagen	Palmyra
Corinth	Phoenix
Cortland	Rochester
Depew	Snyder
East Aurora	Sodus
East Rochester	Tonawanda
Elmira	Troy
Elmira Heights	Watertown
Endicott	Watkins Glen
Evans Mills	Webster
Fulton	Westfield
Holley	Williamsville
Horseheads	Wilson



## PICTURE REPORT



Films and Charts in Caterpillar Classroom . . .



### Teach Tractor Salesmen How To Sell

Caterpillar Tractor Co. salesmen are boning up on what makes their product tick. The company knows the day is coming when the boys on the road will have more to do than just "accept" orders for tractors. The new "sales conference" suite at the plant in Peoria, Ill., is Caterpillar's insurance that its salesmen will be ready.

• **Modern Classroom**—In the big lecture room, the students learn how a tractor works. From the projection room, charts and films clarify the lecture material. A "products application" laboratory is in the planning stage. Here, actual Caterpillar equipment will

be dissected and examined. When the school is completed, Caterpillar thinks it will be one of the most modern industrial instruction units in the United States.

Right now, Caterpillar hasn't much of a selling problem. Tractors—both wheeled and endless-belt-tread types—are still on allocation, with big order backlogs. So are motor-graders. But this market can't last forever. Already, some tractor attachments (like bulldozer equipment) are in good supply; engines are easier to get, too. The school, the company thinks, will make them sell faster.

## Threat to Jobbers

Seagrams can use its new wholesaling branch as a club over jobbers, as it did with their markup demands.

Distillers Corp.-Seagrams, Ltd., set the liquor trade on its ear last week. The reason: The company announced that it would drop its jobbers in the Greater New York area, replace them with a wholesaling subsidiary of its own.

But by week's end Seagrams and its distributors had decided to pick up their commercial relationship where they had left off. The settlement represented something of a victory for Seagrams. And inside the liquor trade, observers speculated what might happen if Seagrams—or any other distiller—ever should activate a wholesale distribution subsidiary.

• **Strike**—A salesmen's strike against distributors started the whole fiasco. They demanded a 1% boost in their commissions on sales. Most salesmen to the retail liquor trade had been getting a 30% commission on sales to package stores and 41% on sales to bars, taverns, and hotels. When they didn't get the increase, they struck.

The distributors took their troubles to the distillers. The wholesalers claimed that they couldn't pay the higher commissions unless the distillers came through with a bigger markup for them.

• **Distillers Comply**—Almost everyone wanted to settle the strike in a hurry. They didn't want to enter the Christmas season—when they do their biggest volume—with dwindling supplies of liquor on the dealers' shelves.

Most distributors finally settled the strike on the basis of a 0.34% increase in salesmen's commissions. Most of the distillers allowed the distributors enough more markup to cover the higher commissions.

• **Seagrams Balks**—But Seagrams didn't. Instead, it told its Greater New York distributors that their services would no longer be required. At the same time, the company announced that it had filed an application with the N. Y. State Liquor Authority for a license to set up its own distributing company, Sea-Cal-Frank Distributors, Inc.

The reaction was immediate. The Wholesale Licensed Alcoholic Beverage Salesmen's Union of Greater New York (A.F.L.) pulled Seagrams salesmen off the job.

• **Threat**—A few days later, Seagrams and its erstwhile distributors talked it over again, reached this agreement: Seagrams would not boost the distributors' markup. And the distributors would

## This NEW BROCHURE

tells about the "quiet" ceiling with 100,000

"Noise Traps"



Send for your FREE copy.  
Learn how Fibre-tone\* gives you **QUIET**

- In this new brochure, you can read in *non-technical* language how noise-control brings *quiet* to your office, restaurant, bank, store, school, factory, or recreation center.

In simple, easy-to-understand words and pictures, the book tells the story of Johns-Manville Fibre-tone, the new low-cost acoustical ceiling unit. Graphic diagrams explain the ingenious Fibre-tone "noise traps"—small holes drilled in the sound-absorbing panels. Photographs of actual installations emphasize Fibre-tone's attractive appearance.

Once you experience the benefits of Fibre-tone, you'll never be satisfied with an ordinary, noise-reflecting ceiling.

Send for this new Fibre-tone brochure . . . and see for yourself how it shows the way to a more comfortable environment, less nerve strain, increased production! Write Johns-Manville, Box 290, Dept. BW-12, New York 16, New York.

\*Reg. U. S. Pat. Off.

Put a ceiling on noise with



Johns-Manville FIBRETONE



## *The letterhead paper you'll find in offices where decisions count*

- Where plans and designs are agreed upon that mold our way of living, present and future, you find Hammermill's *Cockletone Bond* today.
- More and more industrial leaders—architects of America's way of doing things—find in this handsome paper the "heavier" quality feel, the crisp crackle and snap to lend proper impressiveness to their business messages.
- Examine this remarkable accomplishment of modern papermaking for yourself... then consider appointing it your business representative. Its moderate cost will surprise you.

**THE FINEST LETTERHEAD PAPER  
EVER PRODUCED BY HAMMERMILL CRAFTSMEN**

**SEND COUPON NOW...** for *Cockletone Bond* sample book and portfolio containing specimens of modern letterhead design which you'll find useful as a guide when designing—or improving—your own letterhead.

Hammermill Paper Company  
1455 East Lake Road, Erie, Pennsylvania

Please send me—FREE—*Cockletone Bond* and sample book;

Name \_\_\_\_\_

Position \_\_\_\_\_  
(Please attach to, or write on, your business letterhead)

BW-12-11

LOOK FOR THE *Cockletone* WATERMARK

settle the matter of higher commissions with their salesmen.

Despite this settlement, Seagrams did not withdraw its application for a liquor wholesaling license. Seagrams' plans for Sea-Cal-Frank, said the company, "are not yet crystallized." Inside the liquor trade, observers wondered what the company would do with its subsidiary when the wholesaling license was granted. The trade agrees that it is a powerful club over the heads of Seagrams distributors; should they step out of line, Seagrams could activate Sea-Cal-Frank to handle its wholesaling activities. And even if the distributors behave, Seagrams can decide at any time that it can handle its own distribution more profitably than through wholesalers.

• **Schenley's Crack**—During the last six months, some distillers have offered longer margins to retailers through their distributors. They figured, with liquor sales turning sluggish, that retailers would plug the brand with the longest margin. Seagrams claims to have made no such deals.

Schenley, Seagrams' biggest competitor, took the wholesaler-salesman ruckus as an opportunity to take a crack at Seagrams. Schenley said, "We followed our conviction that the wholesale system of distribution is the most economical and the one that best serves the consumer."



## New Chief for Childs

Childs nation-wide restaurant chain took on a new—and experienced—president last week. It was John L. Hennessy (left), recently resigned board chairman of Hotels Statler Company, Inc. Hennessy leaves Statler on Dec. 31 after 35 years with the hotels. He takes over his post with Childs Jan. 1. Shown with Hennessy (above) is Everett Frank, chairman of the board of Childs Co.

# memo to YOU re: 1949



*Think now about ways to reduce marketing costs:*

- Increase volume of profitable sales
- Reduce dollars spent locating and selling profitable business

*Check up on Dodge Reports. See how daily construction news identifies ready-to-buy prospects...at the right moment for effective sales presentations.*

*Write for free copy of "Direct to your market."*

**Investigate DODGE REPORTS...**  
they tell WHEN and WHERE to Sell  
WHAT to WHOM — profitably.

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Daily construction news coverage in  
all states east of the Rockies

Courteous, helpful Dodge Men  
in all principal cities



## DODGE REPORTS

CONSTRUCTION NEWS DIVISION

F. W. DODGE CORPORATION

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# TEN ADHESIVES



**YES** As specialists in developing and applying adhesives made from every available base, we are in the unique position of being able to deliver the exact types of adhesives needed to do any packaging and shipping job — completely and successfully!

Address: 272 Madison Avenue, New York 16; 3641 So. Washtenaw Ave., Chicago 32; 735 Battery St., San Francisco 11; and other principal cities.  
In Canada: Meredith, Simmons & Co., Ltd., Toronto and Montreal. In England: National Adhesives, Ltd., Slough.

**National**  
ADHESIVES

EVERY TYPE OF ADHESIVE FOR EVERY INDUSTRIAL USE

## MARKETING BRIEFS

Nationwide financing arrangement with Commercial Credit Corp. reflects Admiral Corp.'s concern over the approaching buyer's market. Will cover installment purchases of radios, TV sets, ranges, and refrigerators.

G.M.'s 1949 line of cars will be shown in its entirety for the first time Jan. 20 at New York's Waldorf-Astoria.

National Advertising hit a new dollar-volume peak in October. Printers' Ink says biggest gainer was newspapers, up 30% over October, 1947.

C.B.S. will get first crack at television rights on some top-notch sporting events. That comes with its purchase of a 25% chunk of Tournament of Champions, Inc., boxing promoters.

R. H. Macy's sales of \$317-million for the year (ended Oct. 30) were up 6.3% over the preceding year. Net earnings hit \$7.7-million, up about \$1.2-million.

Higher-type comic books are the aim of the Assn. of Comics Magazine Publishers. Its new advisory board includes two well-known educators, a librarian.

Ice Cream is sold in three times as many independent groceries as it was 10 years ago—in 68% of them says "Progressive Grocer." Reason: Grocers are buying refrigeration anyway for frozen foods.

Lifo (last-in—first-out method of figuring inventory costs) should be retroactive for those stores that didn't use it in 1941, say department stores. They are pressing the Treasury to permit it.

Georgia railroads no longer have to advertise their schedules daily in all the state's newspapers, thanks to repeal of a 1907 law.

Price-cutting on TV sets (BW—Dec. 4 '48, p83) may draw fire. Allen B. DuMont Laboratories has threatened suit against a New York dealer selling below fair-trade prices.

Tax-paid withdrawals of distilled spirits during October dipped to 16.1-million gal.—down from 20.7-million in October, 1947.

New advertising revenue: The Atlanta Constitution superimposed its stock-market reports on a pale blue ad for Delta Air Lines.



## FIBERGLAS\* QUIZ: Which buildings are cooking snow?

Want to be an Expert and surprise your friends? You can tell them which roofs in the neighborhood are well insulated and which are not—simply by looking out of your office window after the next snowfall. Snow stays on some roofs long after it begins to be “cooked” off the others.

The difference is insulation. And it shows up in the fuel bills.

A layer of Fiberglas Roof Insulation in a roof deck trims heat losses to a minimum, thanks to an extremely low heat conductivity. It's a boon in summertime, too, when it blocks out a lot of heat that would otherwise wilt the workers inside.

Made of glass fibers that can't rot, shrink or swell, Fiberglas Roof Insulation is a durable

material with high dimensional stability. It is light in weight, too. Adds no significant load to the structure, and requires no special support.

For fuel economy in winter and greater comfort the year around, investigate Fiberglas Roof Insulation. Installed by roofers everywhere. If you have a roofing problem, you will be interested in the latest manual just off the press entitled: “The Design of Insulated Roofs”. Not merely a catalog, this 36-page reading and reference manual, recently sent to leading architects, contains a wealth of valuable material and is, we believe, the first of its kind in the field. Write on your letterhead to: Owens-Corning Fiberglas Corporation, Department 803, Toledo 1, Ohio.

In Canada: Fiberglas Canada Ltd., Toronto, Ontario

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There is one thing that can always be said about conveying equipment that goes into heavy industry—it gets an awful beating. And, it's got to be tough to stay on the job. Plant operating men, responsible for keeping costs down, know that very well—and so do conveyer people who have had years of experience in designing conveying equipment that will work under severe service.

Mathews Engineers like heavy jobs, probably because they've handled so many of them. They've put gravity and power con-

veyers and special conveying machinery in just about every place it can be used to advantage in foundries, steel plants and brass mills.

For these industries, Mathews designs and builds equipment that is heavy enough to stay a long time in a rough game.



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## READERS REPORT:

### Depreciation Policy

Sirs:

I have been following the controversy which has been going on among accountants and in the financial press on the subject of depreciation and income taxes, and in that connection, have read your trend [BW—Nov. 13 '48, p124] with a good deal of interest.

It would be difficult, of course, to find a businessman who would not welcome a more generous approach to the problems of depreciation on the part of the taxing authorities. However, with every will in the world to do so, I have so far not been able to satisfy myself that it is practicable to endeavor to keep accounting records in fixed dollars, which obviously is the net result of an attempt to give recognition to advances in the cost of replacing fixed assets.

The presumption is, I realize, that the shareholder is fooling himself when he thinks he has made a net gain as a result of his year's operations when the gain is expressed in dollars of greatly reduced purchasing power. I appreciate fully the wisdom of his setting up reserves to protect his inventory position, and similarly of seeing that the reserves to protect his fixed assets position are adequate.

But, assuming that the fixed assets were purchased with borrowed funds—that is, assuming that the company has a sizable bond issue which was made for the purpose of financing expansion at some prior period—would you then argue that the shareholder is entitled to figure depreciation at replacement cost when, in truth, his only obligation is to return to the bondholder the same number of dollars as he borrowed in the first instance, regardless of the fact that in the interim their purchasing power has decreased?

Theoretically the shareholder is in the position of having borrowed certain equipment which he has worn out through the years, and from which he has secured enough profit to pay for the equipment and have something left over for himself. Can it not then be argued that if it is going to take him, say, three times as much to replace the equipment, he can turn around and borrow that same amount and start the process all over again? In other words, would not any additional depreciation beyond the original cost which might be provided through the indulgence of the taxgatherer be an unwarranted gain to the shareholder at the expense of the bondholder?

I have never seen this particular aspect of the matter introduced into the current controversy on the subject, and



## SEVEN LEAGUE BOOTS AREN'T ENOUGH!

It takes more than a pair of "seven league boots" to enable a manufacturer to always have a sales engineer quickly available when you are contemplating the purchase of transformers. That's why Wagner maintains trained field engineers in key cities from coast-to-coast. There's one near you, ready to be of service.

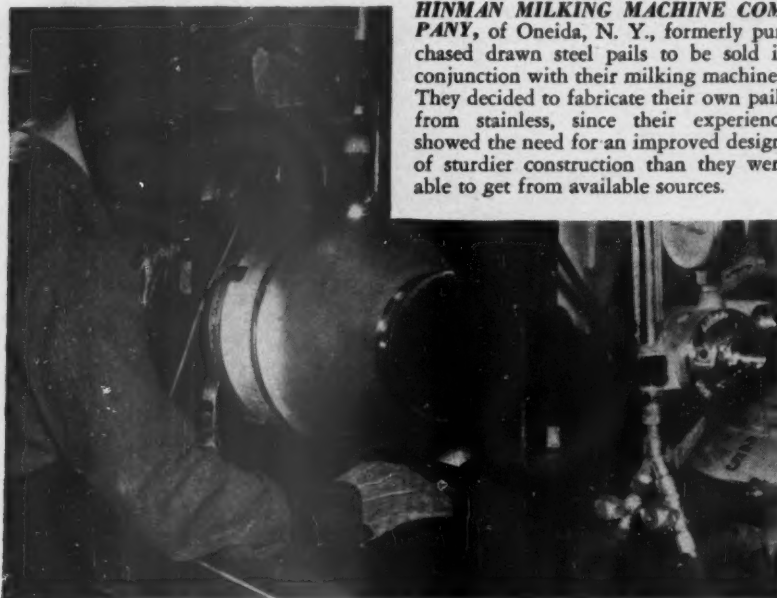
Wagner, a pioneer in the development of transformers, has the experience and facilities to build the best transformers for every need—in industry, commerce, city and farm.

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# Machine Heliwelding turns out a better milk pail at lower cost



**HINMAN MILKING MACHINE COMPANY**, of Oneida, N. Y., formerly purchased drawn steel pails to be sold in conjunction with their milking machines. They decided to fabricate their own pails from stainless, since their experience showed the need for an improved design, of sturdier construction than they were able to get from available sources.

**John View**, Airco Technical Sales Representative, was consulted and he suggested the Heliwelding process with the Airco machine holder, using Airco Helium. After Heliwelding, only a small amount of polishing was necessary

to finish the job, making the cans ready for shipment.

This method was so successful that the customer was able to produce a top quality pail with a tidy saving in money — and time.

• • • • •

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thought I would put it before you to see what might be your reaction.

G. B. ELWIN

VICE-PRESIDENT & TREASURER  
THE STEEL CO. OF CANADA, LTD.  
HAMILTON, ONT.

## Montana Has Power

Sirs:

I have noticed with considerable surprise that your story on the winter power pinch [BW—Oct. 23 '48, p19] contains a map showing Montana in a power shortage area.

Montana now has surplus power and had it throughout the entire period of the war. The Montana Power Co. serves practically all of Montana. Since the early 1940s, it has been able to turn over an average of approximately 50,000 kw. to the Washington, Oregon, and Utah areas and continues to do so.

This company has ample and reliable power reserves to insure its customers service, and there is no prospect of load curtailment of any kind on the system of The Montana Power Co. or elsewhere in Montana.

The Federal Power Commission may have included Montana in Region 7 because of the power shortage in Washington and Oregon, but there is not and has not been and will not be in future years a power shortage in Montana, Idaho, or Utah, as the private utilities in those areas have throughout the years provided adequate power capacity and at the present time the companies serving those three states are all engaged in the construction of additional generating facilities and transmission lines to increase existing capacity.

J. E. CORETTE, JR.

VICE-PRESIDENT & ASST. GEN'L MGR.  
THE MONTANA POWER CO.  
BUTTE, MONT.

• In drawing up the map for our article in the October 23rd issue on the power shortage we used the Federal Power Commission regional breakdown. Because we did so, Montana showed up in a region generally described as having a shortage.

Our understanding is that there is a five state inter-connection of power facilities which provides for drawing on any excess capacity in one part of the region to supply a deficiency in another part. Mr. Corette's letter confirms the fact that surplus power from Montana is being furnished to the Washington, Oregon, and Utah areas.

## State of Business

Sirs:

I have been reading your "Business Outlook" in your issue of Nov. 13, and the general impression one would get

from its perusal is that business is getting better and better.

What you appear to have done is to take the third quarter business as foreshadowing the fourth quarter. But in the past two weeks department store sales in the nation have dropped around 10% in dollar volume alone, and my contacts assure me that a buyer's market in most cars is already here. Home construction has also taken a sharp drop compared with last year. Employment locally is certainly down compared with last year. The only firm spot appears to be in steels and metals, which squeezes a large number of small firms. Otherwise, the business picture is distinctly spotty to say the least.

PHILIP HENRY

ACCOUNTANT AND AUDITOR  
LOS ANGELES

• The Business Outlook never implied that everything is getting better and better—simply that a lot of businesses are not so badly hurt as they seem to think. Sales could not go on breaking records forever—sooner or later they had to fall off from year-ago levels. The November decline in retail sales of which Mr. Henry speaks may mark that turning point. But even the lines that are complaining the loudest are doing 40% to 300% more business than before the war.

With the steel industry at 99% of capacity, with October's construction \$1.7-billion, with electric power output 8% ahead of last year, and with 60-million people holding jobs, BUSINESS WEEK is not convinced that everything is going to pot. For a discussion of reader Henry's fears, see the Business Outlook of Dec. 4.

## New Senator

Sirs:

Your article, "Truman's New Deal," [BW—Nov. 13 '48, p19] did not mention anything about J. Allen Frear, one of the outstanding new senators.

I would like to tell you something about him. He is a young man, hardly 40. He owns and controls some of the largest businesses in Delaware, such as coal, fuel, dairy products, and a mill concern, all of which he has won by hard work and good business dealings.

When you stop to think that he defeated Douglas Buck, who is a du Pont son-in-law and has been in the Senate for some time, and is also a former Governor of Delaware, this is quite an accomplishment.

Mr. Frear has many community interests which take his time, such as our big local hospital, and only this year he was voted the "Man of the year in Delaware."

DELAWARE BANKER  
(Name Withheld)

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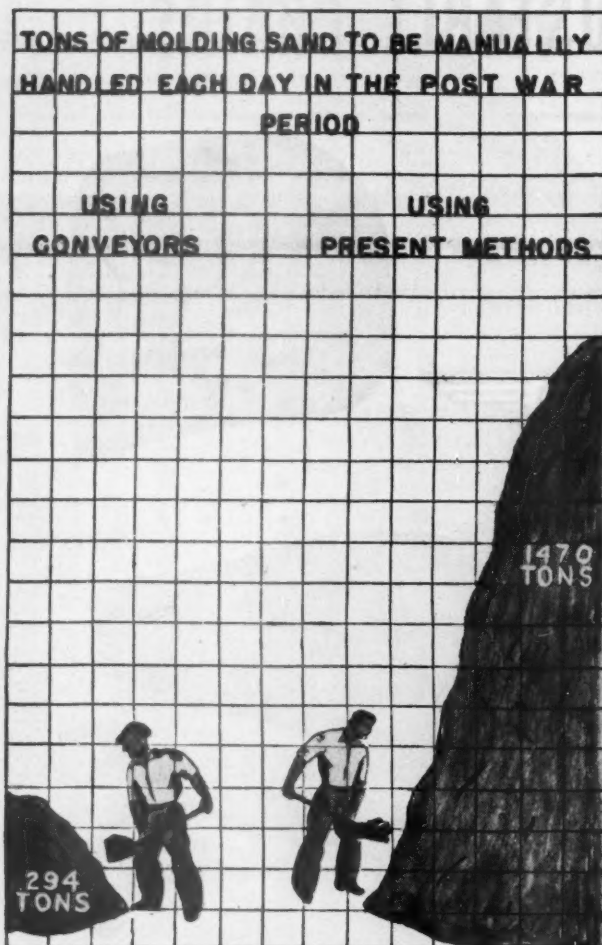
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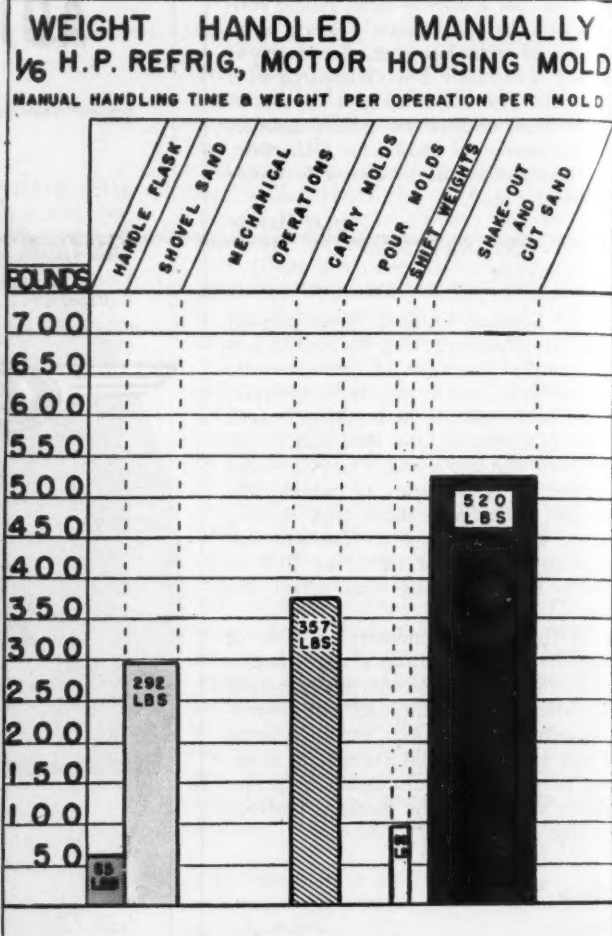
GOODFORM ALUMINUM CHAIRS • METAL DESKS • METAL FILING CABINETS • STEEL SHELVING

# PRODUCTION

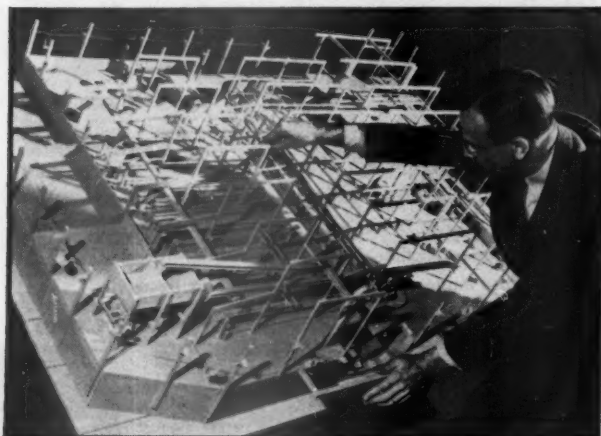
## How To Figure Where You're Going Before M



HEAVING AND HAULING were graphically shown by Springfield foundry chief before Westinghouse decided to mechanize



TO ANALYZE CASTING, plant people made this chart to see how the weight and time factors stacked up



MODEL LAYOUT of "new" foundry took months of research into the type of labor available, quality control, other factors



WIDE RANGE OF CASTINGS for Westinghouse appliances had to be turned out under stable cost and labor conditions

# ore Mechanizing

The careful analysis made by Westinghouse before it re-vamped its foundry is an object lesson for others.

You may be thinking about mechanizing one of your production divisions. Perhaps it's a foundry that's falling behind in the struggle for labor efficiency, lower costs, more output. Sooner or later it will have to be refurbished.

• **Case History**—But does that mean mechanization? If it does, what kind and how much?

Before you come to a decision, it will pay to make an exhaustive study of the factors affecting plant operation. You will want to analyze production quotas; what kind of labor is available; whether machines can efficiently replace muscles; what can be done about costs and quality control. And you also ought to find out what the competition is doing.

Westinghouse Electric Corp. did all this when it went about modernizing its "new" foundry at East Springfield, Mass. Its case history makes a worthwhile study.

• **Facelifting**—Last week, the company was proudly showing how it spent \$14-million there. It put the cash—after long study—into an over-all facelifting that does more than just take a lot of muscle out of foundry work. It also makes working conditions more pleasant, promises to step up output, and eventually cut costs.

The foundry is a "captive" one that supplies the company with gray-iron castings for refrigerators, motors, and appliances. Before the war, it did a good job, produced castings at low cost, met all production schedules adequately. Postwar, however, things weren't so smooth: Labor was hard to get—and keep; production schedules looked a lot tougher; costs were getting out of line. That meant overhaul—but where and how much? To get the answers Westinghouse did a lot of detective work.

• **Elliot's Study**—Chief detective was the foundry superintendent, Frank Elliot, whose casting experience goes back over 24 years. Elliot came up with a hand-hewn report, worked out with his associate, R. G. Elphinstone, and spotted with graphs and charts. The report dug into the why's and wherefore's of the operation, suggested improvements,



... A package that attracts the EYE and protects the PRODUCT

To stand out in competition, a package must have plenty of eye-appeal. And to insure repeat sales, it must keep the product in perfect condition from the factory to the buyer's home.

Leading manufacturers find the answer to both of these requirements in wrapping produced by "PACKAGE" machines.

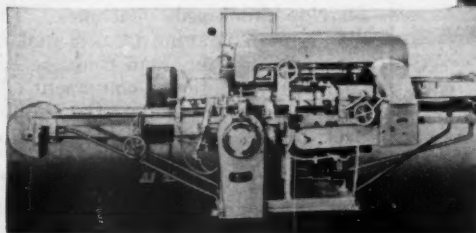
Our model FF is a good example. This machine was specially designed to meet the requirements of frozen food manufacturers. It met them so well that it quickly became a favorite from coast to coast. Soon packers of provisions, margarine, butter, fish, dried fruit, etc., found that they, too, could benefit from the superior wrap produced by the FF.

Using cellophane, foil or laminated material, the machine seals the package hermetically. Registers printed wrappers perfectly by electric eye. Handles trays as well as cartons, and automatically makes allowance for expansion of packages due to freezing. Is quickly adjustable for many sizes, and has a speed of 100 packages per minute.

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Over a Quarter Billion Packages per day are wrapped on our Machines



This has the earmarks of a fable but it's far from it. Compressed air supplied by a Quincy Compressor met and conquered one of the big production problems in the handling of potato chips. Here it is—briefly! Potato chips were bagged and weighed by hand. The Woodman Co. of Atlanta developed a machine for automatically weighing the chips and using compressed air to blow them into the bag. This use of Quincy Compressors increased production, eliminated handling and reduced waste.

More than a hundred manufacturers have put Quincy Compressors to work as a part of their own products. From solving many compressed air problems, Quincy Air Specialists have gained wide experience over the last 30 years. Take advantage of this experience with your own product—or in your plant. Write Dept. W-128.

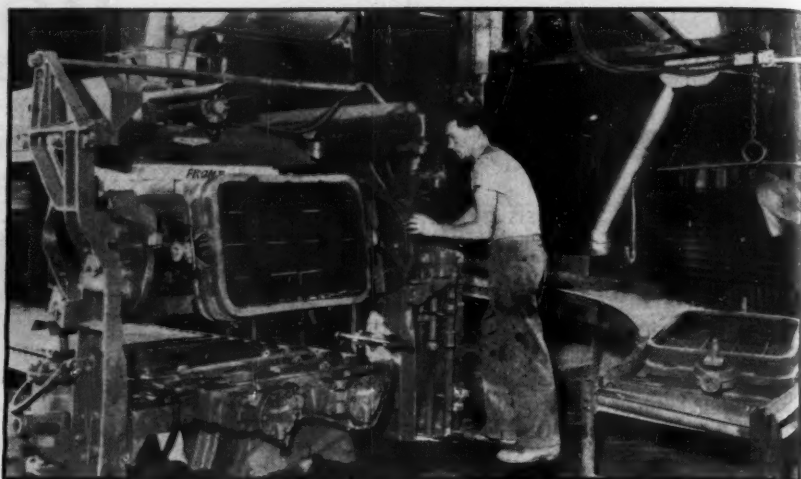
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**MOLDING MACHINE** eliminates backbreaking manual labor. It jolts pattern to squeeze sand around it, turns assembly over, vibrates it again, pulls pattern



**LADLE**, suspended from an overhead monorail, pours iron into molds. A single worker can move the 500-lb. ladle along the pouring line in the East Springfield (Mass.) foundry

sketched out a proposed layout, estimated costs.

Elliot's study proved this point: Mechanization of a plant can't always be a "catalog" operation. In Westinghouse's case, the customary heavy conveyors and standard molding machines wouldn't fit in. Its Springfield operation casts small-size parts for use in highly competitive consumer goods.

• **Recommendations**—Elliot's advice: Develop tailor-made machines. That didn't mean ignoring catalog stuff entirely; for instance, sand could be handled on conventional equipment. But mold-making machines, the double-deck rolling conveyors, and shake-out equipment for sand were all designed to do a specific kind of job in that specific kind of foundry. That's where careful study paid off for Westinghouse.

The final recommendations were built around six basic conditions. In varying degrees, these apply to other manufacturing processes as well:

(1) **Type of Labor Available.** "Manual" labor is no longer easy to get. And for Westinghouse, the problem was worse than usual because its heavy, multiple molds had reached a point that taxed the limit of a man's strength. Also, the average age of workers was rising steadily. Younger men were leaving for easier jobs.

Workers' earnings affected the labor supply, too. Although earnings have risen steadily in the foundry, the increases haven't been big enough to attract labor. Earnings in other shops have increased in greater proportion. Westinghouse had the choice of restoring the old ratio (in favor of the foundry worker), or making working conditions comparable to other shops. Mechanization helps improve these conditions.

(2) **Problems of Manual Handling.** The average worker handled tons of material every day. For example, in making a refrigerator motor housing, a molder



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### PACIFIC-WESTERN GEARED PRODUCTS were already old-timers

Did you know that an automobile was built almost 50 years ago, in northern California? Even then, the metal-working and fabrication industries of the west could draw on the skill of "PACIFIC-WESTERN" for gears and geared machinery.

Now, after a lapse of many years, production of automobiles is growing rapidly in the western states. "PACIFIC-WESTERN" offers a wide variety of geared mechanisms for industrial applications, making special service on all gearing problems available in the west.

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GEAR PRODUCTS

handled more than 48,000 lb. each day; a sand-shakeout laborer, about 130,000 lb. a day. Two men made and poured 110 such castings a day. Considerable manual effort—and time loss—was also involved in carrying molds from place to place for various operations.

(3) **Increased Production Requirements.** If the operation had to meet bigger manufacturing quotas, three moves were possible. The company could: (1) increase floor space and labor force; (2) buy castings outside; (3) design ingenious plant equipment to "stretch" available space and labor. Previous production averaged 22 lb. of casting per sq. ft. of floor space; anticipated demand would be 30 lb. per sq. ft.

Elliot recommended "stretching" the available space, even though it meant running some conveyors outside the building.

(4) **Problems of Cost.** Higher wages, material costs, and overhead mean that daily output per worker had to be increased. Multiple molds help—to a degree. But they must be supplemented by equipment, tools, and techniques that help an individual worker handle more work with less effort.

(5) **Quality Control.** The human element is a big factor behind uneven quality (and rejects), particularly in foundry operation. So mechanization, if handled right, leads to better control of quality. It permits "prescription" control of sand, which means greater control over uniformity, mixture, and delivery. Also, metal melts can be checked constantly to control the chemical and physical properties of iron. (Pouring goes on all day, instead of a single short period.) Finally, it is possible to make immediate inspection of castings after they have been poured.

(6) **Competition.** It was important to keep the important cost advantage the Westinghouse foundry had before the war. Competitors were shaving their costs by mechanizing. Westinghouse had to do likewise, or be at a product-price disadvantage.

• **Go-Ahead**—When management gave Elliot the go-ahead sign, he started putting in the necessary mechanical, automatic, and pushbutton devices.

Work also began on the 4,500 ft. of conveyor line, some of which ran outside, some through tunnels under the floor. The whole job was completed with the loss of only one day's production.

• **Result**—As the renovated plant stands today, Westinghouse has plenty to brag about. Loads lifted by foundry employees have been cut 75%. A new ventilation and dust-removal system changes air every seven minutes, extracts about 3,800 lb. of dust each day. The foundry turns out 10,000 castings a day, in 40 types ranging in weight from ½ lb. to 40 lb. (picture, page 46).

In the new setup, 250 tons of sand

are moved mechanically, delivered to hoppers over each station where molds are loaded. Excess and spilled sand is collected on underfloor conveyors and returned—together with used "hot" sand—to the sand mixer. (Magnets "strain" it of stray iron.)

Molding is done mechanically. The automatic machine scrapes off excess sand, shakes the mold to compact sand around the pattern. Then patterns are removed, iron is poured, and the molds move along a conveyor to an automatic shake-out. That machine drops the hot sand and castings onto a conveyor, sends the flask (mold frame) back to the molding station.

• **More To Come**—Meanwhile, a vibrating screen separates the hot sand from the castings. The castings then slide into trays on a trolley conveyor which travels around the outside of the building. This trip takes an hour, cools the castings for delivery to the sorting and cleaning station. Westinghouse doesn't plan to stop its improvement policy at the foundry. It says that studies are still going on, that new machines will be added as the need develops.

## Earlier Deliveries Promised at Power Show

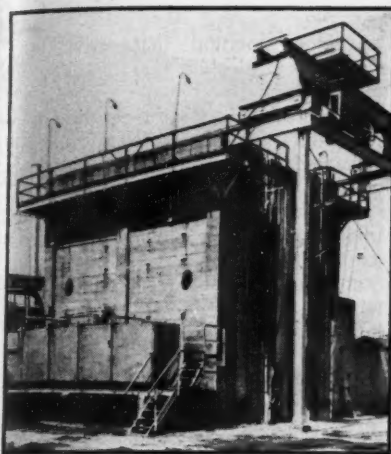
Makers of power-plant machinery got up some real high-pressure steam this year under their own production lines.

You could glean the results last week at the jam-packed exhibits of the 18th National Power Show in New York. Whether manufacturers talked turbines or valves, they had the same story to tell footsore engineers who traipsed the four floors of booths in Grand Central Palace: improved delivery.

• **Backlogs Down**—On small motors, generators, controls, and machine tools, many makers were offering deliveries that ranged from stock to six months. One manufacturer of control equipment put it this way: "The backlog, for us, is about caught up. Now we'll have to start thinking about scratching a little for our sales."

On central-station equipment, of course, the backlog still adds up to a whopping total. But even here the delivery picture is brighter than a year ago. One maker of big turbines and generators has cut deliveries from close to five years down to two or three years. Another is running about 2½ years on generating equipment.

• **Electric Power**—Demand for electrical power is still on the upswing, but it's climbing more slowly now. By 1951, Edison Electrical Institute expects the country's power reserve will be normal (about 14%). The generating capacity then will stack up to a 50% increase over the 1946 level.



**BIRTHPLACE** of a new commercial synthetic: Esso's Baton Rouge plant makes . . .

## Alcohol From Oil

Esso takes the lead in adapting Oxo process to make synthetic eight-carbon alcohol commercially. Wide uses seen.

Last week, the petroleum industry had a new synthetic to boast about: iso-octyl alcohol (BW—Dec. 4 '48, p10).

• **Pioneer**—Esso Standard Oil Co. is making it in carload lots at a Baton Rouge (La.) plant. Esso is doing it by the German Oxo process; it's the first company to achieve commercial production of a chemical by this technique. Chemists are excited over both the new alcohol and the successful commercialization of the process.

• **Eight-Carbon Alcohol**—Esso's product is an "eight-carbon" alcohol. Alcohols are organic compounds in which hydrogen-oxygen groups are linked to carbon atoms. Ordinary alcohols have one, two, or three carbon atoms in the chain. Eight carbon atoms are a long chain—and make the new synthetic alcohol particularly adaptable to synthesizing into the "big" molecules that are needed in making a lot of key chemicals. It can be made into plasticizers, detergents, fatty acids, or "products" (such as lubricants, cutting oils, hydraulic fluids, drying oils, and essential oils).

First off, iso-octyl alcohol is being used as a building block for plasticizers, because plasticizers are in good demand. They're used in protective coatings, in plastic products ranging from upholstery to floor coverings, and in rubber compounding.

• **The Process**—The Oxo method is close kin to Fischer-Tropsch synthesis (BW—Nov. 27 '48, p44) used in making oil from coal. It took Esso three years of research to adapt the technique to the



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Fastest to all intermediate points

Thousands of shippers and receivers of freight from Pacific to Atlantic route via P-I-E for fast, safe, dependable delivery of their goods. They know that P-I-E's proved trucking performance offers more dependable freight service and greater shipping security. Shippers agree it's P-I-E!



## P-I-E

PACIFIC INTERMOUNTAIN EXPRESS

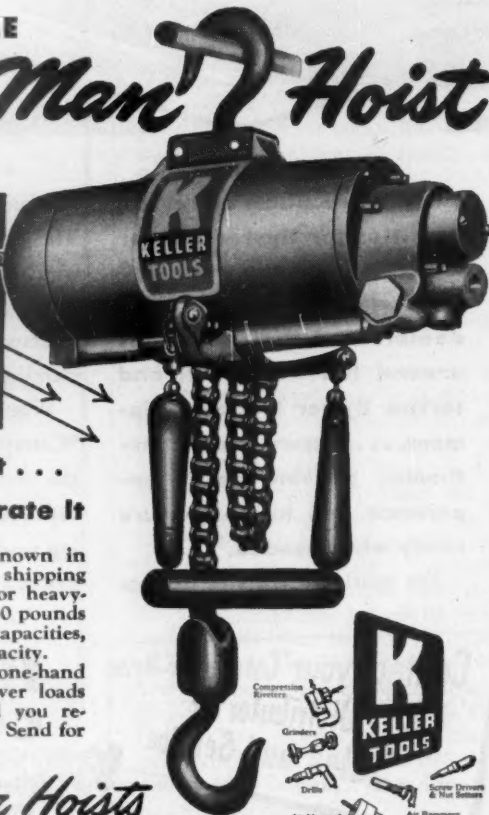
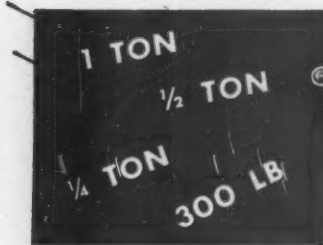
CHICAGO • ST. LOUIS • KANSAS CITY • DENVER • OGDEN • ELKO  
RENO • ELY • POCATELLO • SALT LAKE CITY • SAN FRANCISCO  
LOS ANGELES • SACRAMENTO • OAKLAND

General Offices: Salt Lake City, Utah

### THE MOST USABLE

# One-Man Hoist

### YOU CAN BUY



One Man Can Carry It . . .

Hang It . . . Operate It

These one-man hoists are known in factories, foundries, shops, and shipping rooms as "lightweight hoists for heavy-duty jobs." They weigh only 30 pounds in the 1/2-ton, 1/4-ton, and 300-lb capacities, and 75 pounds in the 1-ton capacity.

Speed is variable. With the one-hand control bar you can lift or lower loads without effort . . . at any speed you require, up to 17 feet per minute. Send for illustrated bulletin.

## KELLER Air Hoists

KELLER TOOL COMPANY • 4812 HARBOR STREET • GRAND HAVEN, MICHIGAN

continuous method that makes the eight-carbon alcohol. Here's how it works:

The raw material is a gasoline fraction from petroleum distillation. This is reacted with carbon monoxide and hydrogen under a pressure of 3,000 p.s.i., in the presence of a catalyst. Result: crude alcohol, which can be purified to yield iso-octyl. Both the carbon monoxide and hydrogen come from natural gas.

• **Wide Interest**—Other companies are thinking about the high-carbon alcohols, too. Standard Oil Co. (Indiana) is planning to produce nine-carbon (nonyl) alcohol at its Whiting, Ind., plant. Also in the Oxo-process running: Oronite Chemical Co., Texas Co., Shell Oil Co., E. I. du Pont de Nemours. The Bureau of Mines has also reported on research on the process.

The Oxo method has an important commercial advantage: Existing high-pressure chemical-making equipment can be modified to accommodate it. Another big point in its favor is its versatility. It can be adapted to change hydrocarbons by synthesis into intermediate chemicals, or into petroleum "products."

## PRODUCTION BRIEFS

Electric transportation equipment turned out by G. E. this year tops '47's mark by 500,000 hp. In the 14-million hp. total: 350 locomotives, 910 units for trolley coaches, street and subway cars.

Low-cost air conditioning system using ice instead of compressors has been worked out at the University of Texas. See Commerce report PB 95253.

Small-plant management report by A. S. M. E. will cover economic importance of small plants, the manager's job, outlook here and abroad.

Television tubes will roll out faster from Pittsburgh Plate Glass. New process: Face plates (where you see the image) are polished while still flat, then formed to spherical shape.

Cooking standards are on the docket at American Standards Assn. Under discussion: Standard names, measurements, and markings for utensils, measuring cups and spoons.

Clay floor and wall tile output is up 16% over last year. In the first nine months, producers turned out about 76-million sq. ft.



## How a steel mill helps to keep horsepower in harness!

**R**ATED horsepower is one thing. Utilizing that power to the maximum over prolonged periods of time can be a horse of another color. In all automotive engines, piston rings are a major link in harnessing this power of combustion, in delivering it in full force to the wheels.

The great 500-mile speed classic at Indianapolis gives piston rings a real chance to prove their quality and stamina. Here, where every mile per hour is invaluable, good compression is a must! Rings must withstand hour after hour of tortuous heat, pressure and furious speed . . . must give sustained protection against oil pumping and loss of power.

It is hardly coincidence that the Athenia Steel Division of National-Standard is a major supplier of specially developed piston ring steel for each of the manufacturers whose rings are selected for the world's finest racing cars. And, incidentally, it's the *same* steel that they put into the rings for *your* car.

Leading piston ring manufacturers and many other users of high quality, special-purpose steel have learned to count on our Athenia Steel Division for exceptional research and development service, and for the meticulous care and control in processing that always leads to better products at lower production cost. Perhaps *you* can benefit by this kind of service. Athenia specialists in steel welcome the chance to show you what cooperation really means.



**DIVISIONS OF NATIONAL-STANDARD CO.**

**ATHENIA STEEL, Clifton, N. J. . . . Flat, High Carbon, Cold Rolled Spring Steel**  
**NATIONAL-STANDARD, Niles, Mich. . . . Tire Wire, Fabricated Braids and Tape**  
**WAGNER LITHO MACHINERY, Jersey City, N. J., Lithographing and Special Machinery**  
**WORCESTER WIRE WORKS, Worcester, Mass. . . . Round Steel Wire, Small Sizes**

# NEW PRODUCTS



## Interoffice TV

Television is no longer purely an entertainment medium; it can now be useful to you in your office.

Last week, Remington Rand started commercial production of a portable television outfit for interoffice communication. The Vericon system is an outgrowth of models that Rand developed during the war for the Air Force. In those days, the camera, mounted in the nose of robot-guided bombers, helped steer the ship on pin-point raids over heavy-flak areas. The camera broadcast a picture to a receiver in the flight control plane.

The commercial model of the system does not broadcast; it transmits the image by coaxial cable—just as music is piped into a bar. The system has three units: a camera, a power generator, and a master viewer. As many as 10 receiving units, in different offices, can be connected to the camera through one master viewer. The system works with most home television screens. The power unit plugs into a 110-v. outlet, draws about the same wattage as an electric iron. Camera weight: 31.5 lb.; over-all measurements: 6½ x 8½ x 22½ in.

Rand thinks the Vericon can do a job in these spots, among others:

(1) Intercall systems—you'll be able to see the person while you talk over your regular hookup; (2) Banks—a teller can verify a check signature simply by calling a central record room, where a clerk can hold the signature card in front of the camera; (3) Merchandising—a screen in your store window will show merchandise actually in use inside the store; (4) Hospitals—students can get a closer view of delicate surgical work.

Rand says the image transmitted by

the system is clear enough to be photographed, is fully visible in daylight. Production is under way at the company's Systems Division, Norwalk, Conn.

• Availability: delivery within 120 days.

## Automatic Dipper

Consecutive dipping and agitating operations are handled automatically by the Wiesner-Rapp Dipping Machine, built by Wiesner-Rapp Co., Inc., 1646 Seneca St., Buffalo 10. After the load is placed in position, a "start" button is pushed; the load is carried to the first tank, dipped, and agitated for a preset time interval. Then it is automatically lifted and carried to the second tank for dipping and agitating. After that, the load is either returned to the start position or conveyed to other tanks, as the process requires.

The entire cycle of load movement, dipping and agitating, can be preset on a timer. The machine will handle an unlimited number of dipping operations. It can be operated semi-automatically, or manually if desired; it doesn't require highly experienced operators. Other advantages, according to the maker: increased production; reduction of supervisory personnel; uniformity of product.

• Availability: three to four months.



## Small Addresser

If you have a small business—with a big mailing list—you can ease the pressure in your mailroom with a new model from Weber Addressing Machine Co., Mount Prospect, Ill. The machine prints addresses from a roll of paper tape. You type out your list on the tape, using a roll of special, dye-impregnated carbon paper.

The roll is then put into the machine, carbon side down. As the envelopes move into position, they are treated with an invisible printing fluid. The carbon impression on the tape is pressed against

the treated section of the envelope to print the address on the paper.

The printing fluid is fed from a glass reservoir to the roller from a wick. You can control the amount of flow. The pressure plate is transparent plastic; thus, you can see the address being printed on each envelope. Weber says a single original list is good for up to 100 runs.

Along with the machine, you get a spool to hold the paper tape and carbon paper on your typewriter. Price: \$47.50.

• Availability: one week.



## Rolling Shelf Space

Storage space on wheels—a system of cabinets, shelves, and lockers that roll on tracks—is marketed by Acrow, Inc., 155 Washington St., Newark, N. J. The Foulkes Rolstore Mobile Storage setup was developed in England during the war.

Big advantage of the system is its saving of floor space—about 50%, company engineers say. Cabinets are lined up in rows just a few inches apart. To get to a cabinet in the rear, you simply push the ones in front aside—they roll along the tracks at a finger's touch, Acrow says.

Along with the mobile units, the system also has additional fixed shelves and cabinets.

• Availability: six weeks.

## Tub Topper

A neat bit of camouflage for the home laundry is a cabinet and cover that hides the wash tubs, helps brighten up your basement decor.

The Rollaway cabinet is a white, baked-enamel unit, mounted on swivel, ball-bearing, rubber casters. The back of the cabinet is cut away so you can slide it over the tubs to keep them out of sight. While you're doing the laun-



## New... **RCA WIRE RECORDER**



### **RCA WIRE RECORDER WITH SECRETARIAL ATTACHMENTS**

Use it for the speedy dictation and transcription of letters, bulletins, memos and reports.

Foot-control switch automatically starts and stops recorder, rewinds wire. Small lightweight hand-held microphone with start-stop switch. A lightweight adjustable head set provides maximum comfort and privacy to secretary.

### • Easy to Record and Play Back • Cuts Paper Work in Half

• You make accurate on-the-spot recordings and play them back with crystal-clear tone quality. Save work, save time, increase efficiency in your business or personal work with an RCA WIRE RECORDER. It's as easy to operate as a radio.

#### **Here are just a few uses for the RCA Wire Recorder**

**Conferences and Discussions**—All opinions are recorded verbatim for play-back later or typing in report form.

**Speeches and Lectures**—Can be recorded and played back for study, editing, timing, delivery and memorizing.

**Professional**—Lawyers record interviews with clients. Doctors can review

patient's history.

**Educational**—Speech, foreign language and dramatic classes use it for speech correction, for improving diction. Music departments will find it valuable in many ways.

**At Home**—Dictate letters, memos, ideas and other memoranda for transcription at office. Record radio programs, voices of family and friends.

A "plug-in" cartridge—exclusive to RCA—records up to one-half hour. Recordings may be played immediately without tedious rewinding. You can erase and record new programs using the same cartridge. No wire handling or threading. The RCA WIRE RECORDER is lightweight and portable.



**SOUND PRODUCTS**

**RADIO CORPORATION  
of AMERICA**

**CAMDEN, N. J.**

#### **MAIL COUPON—For Complete Information**



RCA SOUND PRODUCTS (Dept. 16L-S)  
Radio Corporation of America, Camden, N. J.

Please send complete information on the RCA Wire Recorder.

Name \_\_\_\_\_

Company \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_



# Reporting

## It took 1,700,000 Canadians TO WRITE THIS BILLION-DOLLAR STORY...

Across the nation—in cities, towns and villages—the Bank of Montreal has kept the money of 1,700,000 customers, hard at work . . . helping Canadians in every walk of life to make a better future for themselves and for Canada.

Here is the money that makes the wheels of commerce turn . . . that provides thousands of business enterprises—from the largest corporation to the smallest one-man show—with the credit they need to carry on from day to day.

To citizens on salaries . . . to farmers with seasonal incomes . . . to merchants, manufacturers, businessmen in every worthwhile line of endeavour . . . to municipalities, school boards and governments . . . to churches, hospitals and all types of public institutions . . . hundreds of millions of dollars are being loaned by B of M managers at more than 500 branches from the Atlantic to the Pacific.

Canada is the third greatest trading nation of the world . . . it is the biggest customer of the United States, buying well over a billion dollars in American goods already in 1948.

Here is a market worth knowing—worth cultivating. Here is a bank—Canada's first bank—that can help you to know the market better and to cultivate it with profit.

### U.S. OFFICES

*New York 5:* 64 Wall Street—C. T. Aulph, A. St. C. Nichol, F. W. Hunter, Agents; *Chicago 3:* 27 South La Salle Street—L. E. Tritschler, Manager; *San Francisco 4:* Bank of Montreal (San Francisco)—333 California St.—G. T. Eaton, President.

### U.K. OFFICES

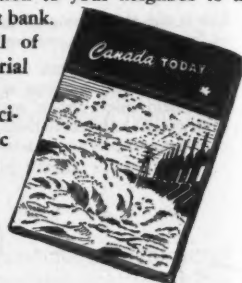
*London:* 47 Threadneedle St., E.C.2; 9 Waterloo Place, S.W.1.

### DO YOU WANT THE REAL STORY ON CANADA?

Here's a quick, reliable introduction to your neighbor to the North, just published by Canada's first bank.

This 100-page little book—full of facts and photos of Canadian industrial life—is yours for the asking.

For your copy—and for any specific information on Canadian economic life—write us at any of the offices mentioned here, or to the Business Development Department, Bank of Montreal, Place d'Armes, Montreal.



# BANK OF MONTREAL

## Canada's First Bank

IN CANADA SINCE 1817... IN THE U.S. SINCE 1859 • HEAD OFFICE, MONTREAL

# THE FACTS BEHIND THE FIGURES

## WHAT THE B of M HAS TO MEET ITS OBLIGATIONS:

**CASH:** The B of M has cash in its vaults and money on deposit with the Bank of Canada amounting to



\$ 211,721,990.06

**MONEY** in the form of notes, cheques on, and deposits with other banks . . . . .



114,887,350.99

**INVESTMENTS:** The B of M has over a billion dollars invested in high-grade government bonds and other public securities, which have a ready market. Listed on the Bank's books at a figure not greater than their market value, they amount to



1,003,513,939.08

The B of M has other bonds, debentures and stocks, representing in large measure assistance to industry for plant development in the post-war period. These investments are carried at . . . . .



129,037,998.89

**CALL LOANS:** The B of M has call loans which are fully protected by quickly saleable securities. These loans amount to . . . . .



31,177,918.00

**QUICKLY AVAILABLE RESOURCES:** The resources listed above, all of which can quickly be turned into cash, cover 78.09% of all that the Bank owes to the public. These "quick assets" amount to . . . . .

\$1,490,339,197.02

**LOANS:** During the year, many millions of dollars have been lent to business and industrial enterprises for production of every kind — to farmers, fishermen, lumbermen and ranchers — to citizens in all walks of life, and to Provincial and Municipal Governments and School Districts. These loans now amount to



456,266,244.22

**BANK BUILDINGS:** In hamlets, villages, towns and large cities from coast to coast the B of M serves its customers at more than 500 offices. The value of the buildings owned by the Bank, together with furniture and equipment, is shown on its books at . . . . .



15,391,604.71

**OTHER ASSETS:** These chiefly represent liabilities of customers for commitments made by the Bank on their behalf, covering foreign and domestic trade transactions . . . . .



29,383,602.12

**TOTAL RESOURCES WHICH THE B of M HAS TO MEET ITS OBLIGATIONS** . . . . .

\$1,991,380,648.07

## WHAT THE B of M OWES TO OTHERS:

**DEPOSITS:** While many business firms, manufacturers, merchants, farmers and people in every type of business have large deposits with the B of M, the bulk of the money on deposit with the Bank is the savings of well over a million private citizens. The total of all deposits is



\$1,877,011,226.85

**BANK NOTES:** B of M bills in circulation, which are payable on presentation, amount to . . . . .



4,244,517.00

**OTHER LIABILITIES:** Miscellaneous items, representing mainly commitments undertaken by the Bank on behalf of customers in their foreign and domestic trade transactions . . . . .



27,185,663.58

**TOTAL OF WHAT THE B of M OWES ITS DEPOSITORS AND OTHERS** . . . . .

\$1,908,441,407.43

**TO PAY ALL IT OWES, THE B of M HAS TOTAL RESOURCES, AS SHOWN ON THE LEFT SIDE OF THIS STATEMENT, AMOUNTING TO** . . . . .

1,991,380,648.07

**WHICH MEANS THAT THE B of M HAS RESOURCES, OVER AND ABOVE WHAT IT OWES, AMOUNTING TO** . . . . .

\$ 82,939,240.64

This figure of \$82,939,240.64 is made up of money subscribed by the shareholders and, to some extent, of profits which have from time to time been ploughed back into the business to broaden the Bank's services and to give added protection for the depositors.

**EARNINGS** — After paying all overhead expenses, including staff salaries, bonuses and contributions to the Pension Fund, and after making provision for contingencies, and for depreciation of Bank premises, furniture and equipment, the B of M reports earnings for the twelve months ended October 30th, 1948, of . . . . .

\$ 8,439,669.54

Provision for Dominion Income and Excess Profits Taxes and Provincial Taxes . . . . .

2,980,000.00

Leaving Net Earnings of . . . . .

\$ 5,459,669.54

This amount was distributed as follows:

Dividends to Shareholders . . . . .

\$ 3,600,000.00

Balance to Profit and Loss Account . . . . .

1,859,669.54

\* \* \*

## B of M EARNINGS ON THE SHAREHOLDERS' INVESTMENT

On each dollar of the shareholders' money invested in the Bank of Montreal, the Bank earned 10.17 cents in 1948.

AND HOW THEY WERE DIVIDED

{ To TAXES . . . . . 3.59 cents  
To SHAREHOLDERS . . . . . 4.34 cents  
To SURPLUS . . . . . 2.24 cents

MORE THAN 500 BRANCHES THROUGHOUT CANADA AND NEWFOUNDLAND


  
 Leading Industries Throughout  
 the Nation **PREFER VICTOR**  
 16mm SOUND MOTION PICTURE PROJECTORS

There is a Victor 16mm Sound Motion Picture Projector to meet every type of audience requirement.

## Kelvinator Division OF NASH-KELVINATOR CORPORATION

**Stimulates Personnel Training and Promotion with VICTOR and 16mm Sound Films**

Another leader in modern industry—Kelvinator—has enthusiastically endorsed 16mm as an all-important phase of its expansive training and selling program. To meet its 16mm requirements, Kelvinator confidently utilizes Victor for dependable performance. Both the Victor Lite-Weight and Victor

Triumph 60 projectors provide unequalled assistance in the projection room at Nash-Kelvinator Corporation headquarters, Detroit, Michigan.

Write today for Victor's industrial folder to add impetus to your sales and training programs.

**VICTOR ACCELERATES MODERN SELLING AND TRAINING**

*Victor Animalograph Corporation*

A DIVISION OF CURTIS-WRIGHT CORPORATION  
Dept. BW-16 • Home Office and Factory: Bensenville, Iowa  
New York • Chicago • Distributors Throughout the World

*It costs less than you think to own a*

# BURROUGHS

Only  
**\$125**



8-Column  
Adding Machine  
Capacity 999,999.99

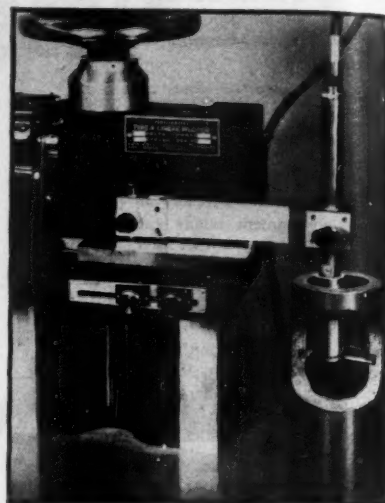
Only huge volume production to meet great popular demand makes it possible to offer this world-famed Burroughs adding machine at so low a price! Precision-built throughout for speed, accuracy, long life . . . no other machine at comparable price can match it. Put this Burroughs to work for you. Telephone your local Burroughs office for a demonstration today, or write—BURROUGHS ADDING MACHINE CO., DETROIT 32, MICH.



dry, you can move the cabinet aside, use it as a utility table. There's a shelf for soaps, clothes pins, and bleaches.

The maker, Fowler Mfg. Co., 2545 S. E. Gladstone St., Portland, Ore., points out these uses for the 8-q. ft. table top: (1) a sorting surface for clothes; (2) a sprinkling table; (3) space for folding and sorting finished work.

• Availability: immediate on the Coast, two to three months in the East.



## Roughness Tester

Roughness measurements on hard-to-get-at surfaces are easy with a tracing gage designed by Physicists Research Co., 321 S. Main St., Ann Arbor, Mich.

The GB Tracer can be hooked up with any standard profile meter to record the measurements it takes. The gage's tracing point is set on the end of a narrow beam; that's so it can get at small holes and slots. This beam projects horizontally from the bottom of the tracer. A mechanical pilot controls the actual tracing operation.

By adjusting the angle of the beam, you can handle both crosswise and lengthwise tracings in narrow slots and grooves and on gear teeth.

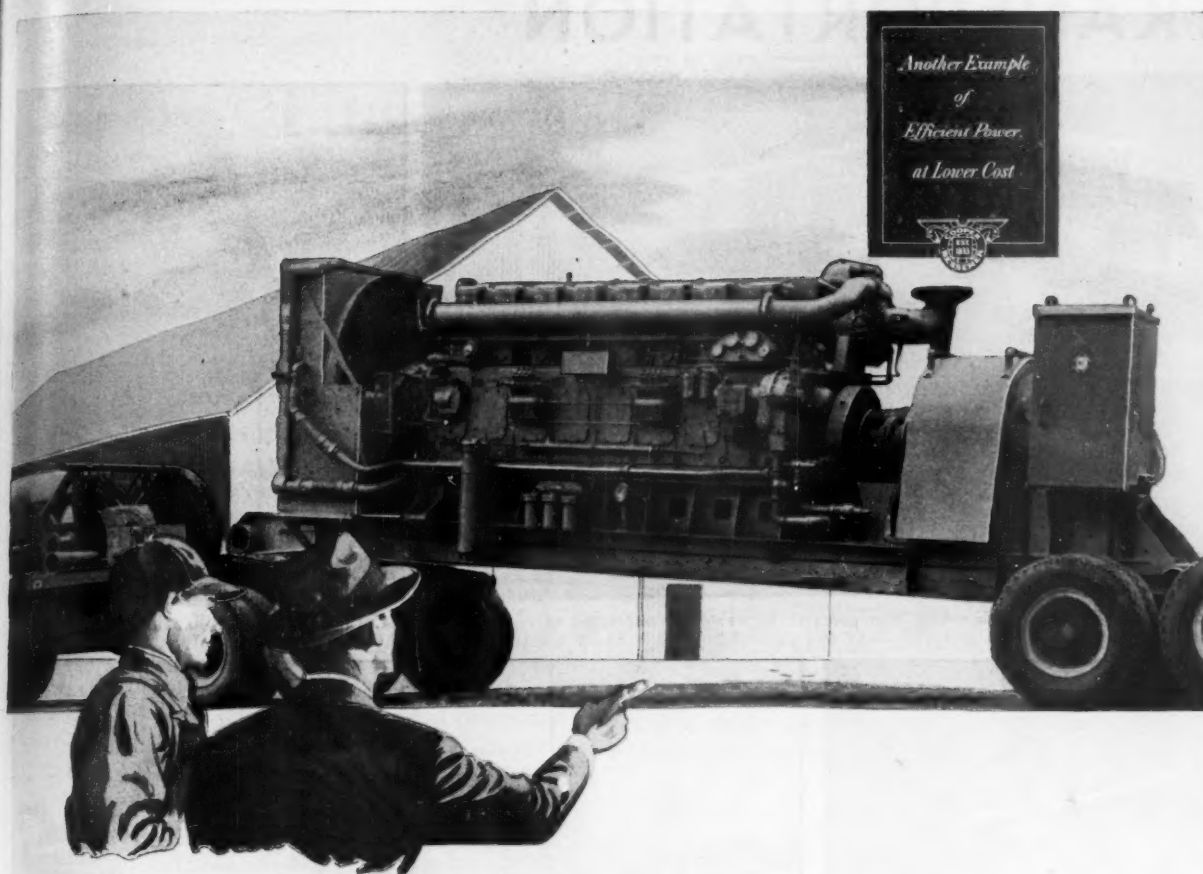
Holes as small as 7/64 in. can be probed to a depth of 1/2 in. with the tracer, the company says.

• Availability: one month.

## P.S.

High-pressure hose for pile drivers is built to take a double beating from steam and hot oil. It has a rubber core, two or three plies of braided steel wire, a ply of asbestos cord, and a heat-resistant rubber cover, U. S. Rubber Co. makes it.

Intercom circuit has a device to cut out shop noises. It handles usual two-way conversations, also acts as a paging system. Executone, Inc., 415 Lexington Ave., New York 17, makes it.



## Rolling power plant delivers savings door-to-door

**H**ERE'S how a progressive oil pipe line company put a money-saving idea to work. They reasoned: why should we spend big money to install extra, stand-by power equipment in each of our pipe line pumping stations if fewer, portable units will do the job as well?

This led to the truck-mounted diesel power plant shown above . . . and three others just like it. All are Cooper-Bessemer powered. They simply roll up to pumping stations and take over the power job whenever the regular units are to be shut down for maintenance or overhaul.

Cooper-Bessemer turbo-supercharged diesels were the logical choice for this unusual service. For example, new ideas in engine cooling, worked out by Cooper-Bessemer engineers, helped make possible self-sufficient portable units of this size. Other Cooper-Bessemer developments assured the stamina and extreme com-

pactness so necessary to make the plan a practical one.

The kind of development work that made a success of these rolling power plants goes on all the time at Cooper-Bessemer . . . is applied to gas engines, diesels and gas-diesels for *every* kind of heavy-duty power service.

If you want to know how you can cut your power costs year in, year out, find out about the *new* things being done by one of America's *oldest* engine builders.

*The*  
**Cooper-Bessemer**  
*Corporation*

MOUNT VERNON, OHIO

GROVE CITY, PA.

DIESELS • GAS ENGINES • ENGINE-DRIVEN AND MOTOR-DRIVEN COMPRESSORS • HIGH PRESSURE LIQUID PUMPS

# TRANSPORTATION



HEAVY TRUCKS rolling over concrete highways are one cause of . . .

PAVEMENT WEAR like this. Is solution . . .



REPAIRING subgrade and slabs or . . .



CHECKING AXLE LOADS to keep truck weights to legal limits?

## Who's to Blame for Damaged Roads?

Pavement pumping that cracks concrete increases with heavier truck loads. Is it a trucking or engineering problem?

What makes a concrete highway pavement "pump"? This is a multi-million-dollar question to taxpayers; millions yearly go into correcting pavement pumping. And the question is of special interest to two groups: (1) the engineers who build the highways, and (2) the owners of the big trucks that ride them—who are constantly fighting against load-limit legislation.

Slab pumping displaces the subgrade material under the pavement. If it isn't

checked, heavy loads will break down the slab. It isn't, of course, the only way a good highway gets spoiled (BW—Jul. 31'48, p22). But it's an important one. What's responsible for it?

• **Whose Fault?**—Last week, the truck operators and highway research engineers were pointing accusing fingers at each other. Each group was saying, "There's the guilty party."

The truck operators say: Pumping is an engineering headache. If a road is

made right, it doesn't pump; it occurs only with soils of the plastic type—where there is a considerable clay content.

The engineer says: It's true that you can build a pavement that won't pump. But it will cost a whale of a lot of money. You could get the same results more economically by cutting down truck loads. It's the over-heavy truck that is mainly to blame for subgrade pumping.

• **Cause and Cure**—Slab pumping starts with an accumulation of water under the pavement, in a plastic subgrade soil. As wheels move over the slab, the slab

# The Election and the Business Outlook

## *The Economic Role of Government*

Stated in the broadest terms, the effect of the election has been to remove any prospect of immediate change in the general relation of government to economic life in the United States. The politico-economic environment in which the American people are to live and work in the next four years (or possibly two years) has been determined. It is essentially the same environment that existed in the immediate prewar period.

Government has asserted a greater measure of responsibility for the economic condition of the people and has assumed new powers in the effort to meet that responsibility. To what extent and in what directions is such intervention compatible with long-term prosperity and progress under private enterprise?

We are still living in the aftermath of war. As long as the present feverish activity continues, the acid test of the New Deal experiment can be avoided. Sooner or later, however, a transition to more rugged economic conditions must occur. To maintain its financial soundness and lay the groundwork for future expansion, business will then have to make broad readjustments. Will taxation, regulatory laws and administrative regulations leave enough flexibility to make such readjustments possible? And will these restrictive influences leave enough prospect of future earnings to warrant the risk and the effort that business managers and investors must undertake if economic health and growth are to continue?

The experience of the prewar years is certainly not encouraging in its bearing on these questions. The persistent failure of recovery to occur during that period, despite the billions of dollars spent by the Government in its "pump-priming" efforts, suggested the presence of new elements in the economic environment that were strongly inimical to the vigorous revival that had invariably followed business reactions in the past. Only the overwhelming emergency of war, with its compelling needs

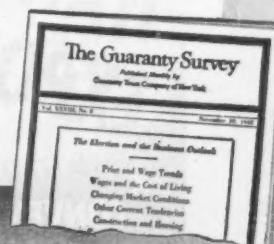
and its inflationary mechanisms, sufficed to overcome the industrial stagnation.

If a similar situation should arise in the future, without a new international military crisis to alter the course of affairs, our half-free and half-controlled economy would stand at a parting of the ways. On the one hand would lie the restoration of the freedoms that had been proved indispensable to the successful functioning of private enterprise—on the other, the drift toward totalitarianism.

There is no question which path the American people would choose, provided they really had a free choice and were clearly aware of the nature of their decision. Their traditional devotion to economic freedom has not vanished. But an entrenched bureaucracy is a powerful force, and industrial stagnation spells hardships that demand quick relief. A time of dire emergency is not one for decisions of vital and lasting importance.

Economic freedom, as everyone knows, is a relative term. All governments intervene to some extent in economic life, and the degrees and forms of intervention vary in response to changing needs and conditions. But under any conceivable conditions, two cardinal freedoms appear indispensable to the effective functioning of private enterprise. One is freedom of markets and prices to reflect wants on the one hand and costs on the other, and thus give direction to the industrial energies of the people. The second is freedom of business concerns and investors to earn and retain sufficient profits to furnish driving force for the economic machine. Assurance of continued welfare under private enterprise demands that these pivotal liberties be recognized and protected.

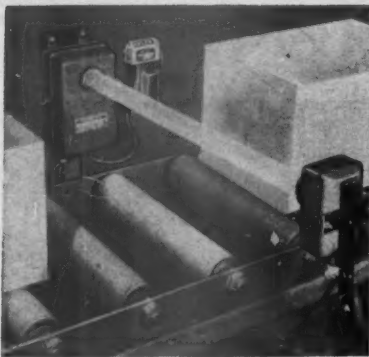
—From an article in the current issue of THE GUARANTY SURVEY, monthly review of business and economic conditions published by Guaranty Trust Company of New York, available to executives on request.



## Guaranty Trust Company of New York

*Capital Funds, \$365,000,000*

140 Broadway    Fifth Ave. at 44th St.    Madison Ave. at 60th St.    Rockefeller Plaza at 50th St.    London    Paris  
New York 15    New York 18    New York 21    New York 20    Brussels



## Count Production Photo-Electrically!

### THE PRODUCTIMETER LINE

offers a compact unit for remote control operation . . . a ruggedly constructed electric counter that may be placed at any desired location . . . and a specially designed moisture-proof photo-electric control and light beam. Each object interrupting the light beam is registered on the counter.

For more effective materials handling, write us about your counting problem.

Catalog 16 available on request.

### DURANT MFG. COMPANY

1906 N. Buffum St.  
Milwaukee 1, Wis.

106 Orange St.  
Providence 3, R. I.

THE *Cost Reduction* SHOW

3rd National  
MATERIALS  
HANDLING  
EXPOSITION

CONVENTION HALL  
PHILADELPHIA  
JAN. 10-14-1949

pushes down. The water spurts out wherever it can—through a joint or a crack, or along the edges of the pavement. At each squirt, the water carries out some soil particles with it. Pretty soon, cavities develop under the slab. Eventually, the unsupported slabs crack and break up into smaller sections. This makes new openings for the subgrade soil to pump through.

Once pumping starts, there's only one way to stop it: Drill holes in the pavement and fill the voids beneath by forcing in either hot asphalt of the proper type or a soil-cement slurry. Most highway experts like the asphalt filler better. But it's a costly treatment; often it has to be repeated.

• **New Evidence**—The engineers now have fresh evidence that it's the extra-heavy truck that does most of the damage. Indiana's Purdue University and its state highway commission have come out with a joint research report. It names the heavy truck as the chief culprit—particularly the few trucks that violate legal weight limits. Less than 1% of all vehicles using Indiana highways break the load law, the study found.

Indiana didn't have any pumping problem before 1940. Then in the seven years 1940-47, 12% of the concrete pavement on state highways developed subgrade pumping. During those years, pumping occurred on 442 miles. Part of this pumping was repaired, but the net figure for uncorrected pumping pavement increased from 243 miles in 1943 to 325 miles in 1947.

• **Correlated**—The significant point is that during the years when pumping developed both the number and weight of trucks increased, according to traffic data of the state. Truck-weight surveys made in 1936 and 1946 indicate, for example, that there were 14 times as many violations of the 18,000-lb. axle-load limit in 1946 as in 1936. And the research study points out that the percentage of trucks having gross weights greater than 40,000 lb. increased from 0.05% of all vehicles in 1936 to 0.79% in 1946.

Axle loads and axle spacing are the vehicle factors that affect slab pumping, engineers say. Gross loads heavier than 40,000 lb. can be all right if they are carried on a sufficient number of axles, properly spaced. A maximum permissible load of 18,000 lb. per axle, recommended by the American Assn. of State Highway Officials in 1946, has been widely adopted by the states.

• **Immediate Problem**—It's evidence like the Indiana study that bolsters the engineers' claims that there's a direct correlation between pumping and axle loads. And while they grant that it's possible to build roads that won't pump—for a price—they say that's not the immediate problem. The immediate prob-

lem is how to protect the huge investment in pavement that, they insist, wasn't built to carry today's heavy axle loads.

• **Economics**—The argument boils down to a question of economics: If you grant that there's a direct relation between heavy loads and subgrade pumping, would it be cheaper to cut down axle loadings or to repair and replace damaged pavement?

Cost of replacing displaced subgrade with asphalt can go as high as \$2,000 a mile, if the slab is badly broken.

• **Further Study**—Truckers have not closed their eyes to the possibility that lighter loadings may be more economical than those that crowd the legal limit—or go above it. This year, they helped the quasi-governmental Highway Research Board and Public Roads Administration carry on highway hauling tests in Pennsylvania. The results are now being analyzed. Both truckers and engineers are looking forward to the final report. It will give them up-to-date data on the economics of vehicle sizes and weights.

Not all states have correlated figures on truck loadings with highway damage. A committee of the Highway Research Board has been gathering data since 1942. Findings will be summarized in a final report to be published next year. It will cover subgrade pumping data from at least seven states. Four states—Illinois, Indiana, Kansas, and Tennessee—have already made special reports to the board; these include figures on subgrade pumping, correlated with truck traffic and loading statistics.

• **Conclusions**—So far, the combined evidence points strongly to the conclusion that four basic conditions underlie subgrade pumping: (1) existence of joints or cracks in the pavement; (2) free water under the slab; (3) subgrade soil of a kind that can pump through open joints or cracks, or at the pavement edge; and (4) frequent heavy axle loads.

• **Divided**—Those four factors are the crux of the whole argument. The first three are enough to put the problem in the laps of the engineers, many truckers feel. But so long as weather remains out of human control, the first two conditions are inevitable, engineers insist. As to the third, they know much more about soils now than they did when most of the pavements were built, but complete knowledge is years in the future.

Thus, they say, granular (or sandy) subgrade materials, are regarded as pump-proof today. Yet, in the last two years, Indiana has reported uneven slab displacement on sand subgrade; there's no pumping, but the pavement settles much as it does over pumping subgrade.

And when it comes to point four, the engineers have only one thing to say to truck operators: Your move.

# Let's be modern about everything but Christmas



**I**N THIS WORLD of ours, rocking ahead at such dizzy speed that it has most of us racing madly just to keep up, there has come lately an increasing note of nostalgia.

It is as though people were trying, in the rush of change and innovation, to hold on to those things which were best from more sane, settled and happy times, lest they fall into the discard, too. There are certain timeless values, you know, and at the top of the list is Christmas.

Do you remember Christmas as it was, and as it should be? Christmas is not a Roman holiday for

storekeepers. It is the Child of Bethlehem's day. It is a family day, a children's day; a time for homecomings and kinship; a time for the renewal of old friendships and the burial of old hates.

Christmas is, in short, a time for recognizing the essential brotherhood of man—the brotherhood of capital and labor in the industrial family, and of nations in the world family.

"Peace on Earth, Good Will toward Men" . . . is it too much to hope that the meaning of Christmas can come this year to minds more willing to receive it, in a world that stands in stark need of it?



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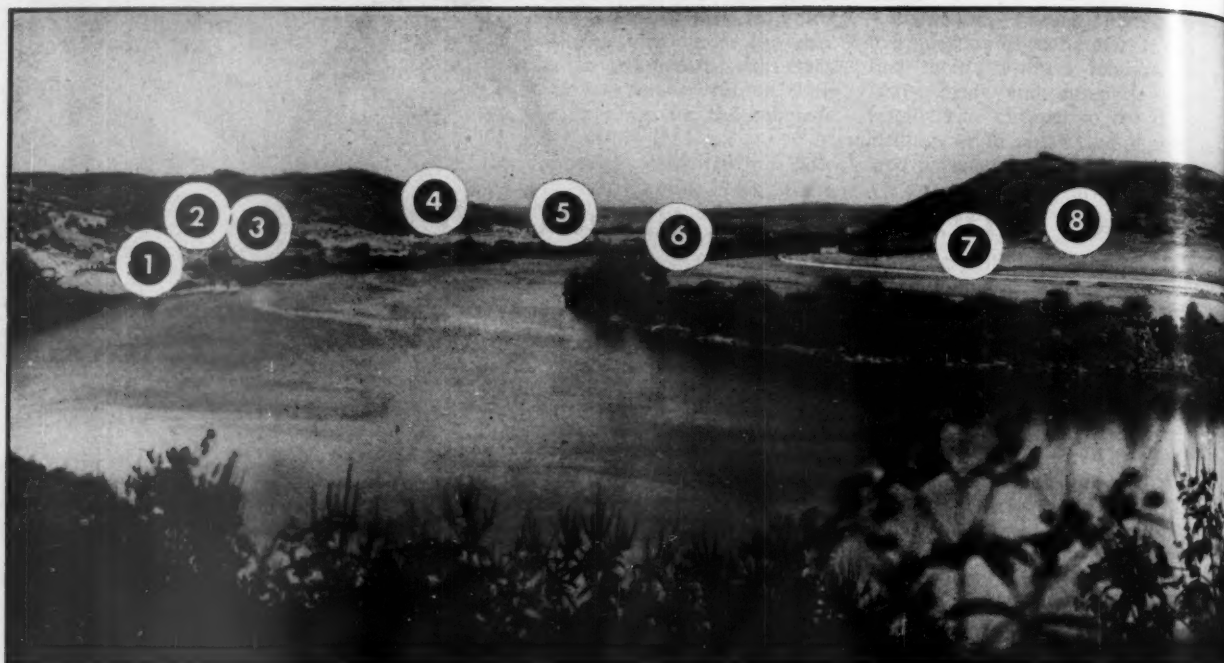
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# REGIONS



A TYPICAL INDUSTRIAL SITE ON THE UPPER OHIO RIVER

1—Coal Tipple; river shipping  
2—Ohio Route 7

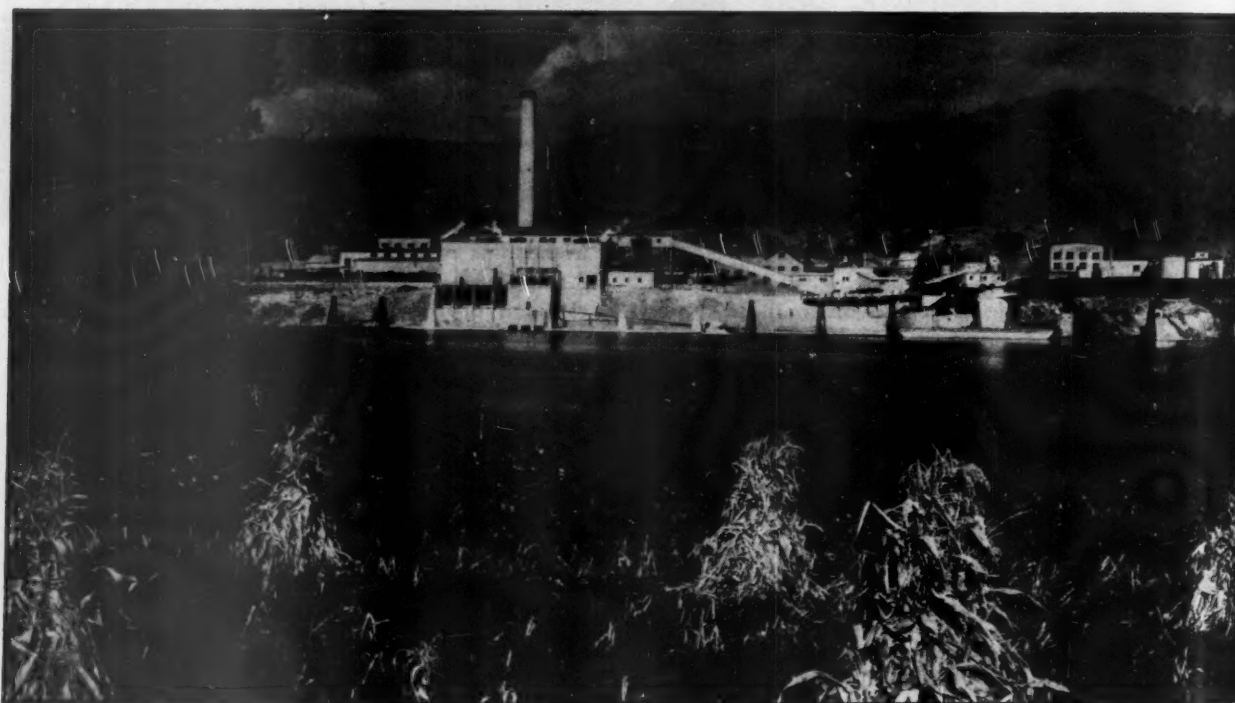
3—Coal mine  
4—Power-transmission line

5—Potential plant site, Ohio  
6—Power-transmission line

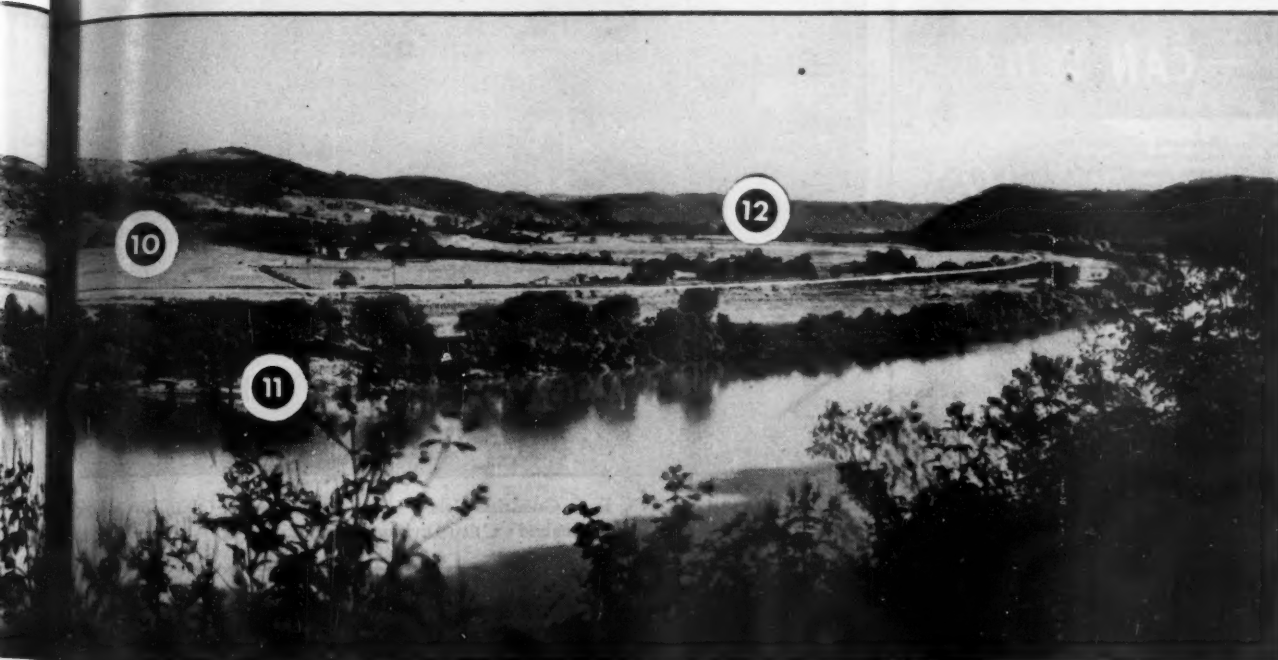
7—Railroad  
8—West Virginia Route 2

9—Ohio River

## The Upper Ohio Valley: Industry Discoveries



FACTORY IN THE FIELDS: Move to the valley was started by Pittsburgh Plate Glass Co.'s Columbia Chemical Division, at Natrium, W. Va.



UPPER OHIO RIVER, NEAR WHEELING, W. VA.

10—Potential plant site, West Virginia  
11—River shipping 12—Coal mine

## New Area

Farm country before the war, the valley now boasts nine big plants built or building. Its businessmen are seeking others.

A crystal of salt started it: Now the upper Ohio River valley is changing from a farming area to an industrial center.

Before the war, there was almost no industry in the region—except the steel mills at Wheeling, and a few plants at Parkersburg, W. Va., and Marietta, Ohio. Today, nine huge plants are built or building along the river, with more to come.

• **Salt**—Just before the war, Dwight R. Means, assistant to the vice-president of Pittsburgh Plate Glass Corp., was looking for a new plant site. The company's Columbia Chemical Division needed lots of coal, water, transport, and salt.

Means knew there was a salt bed in northern Ohio which pointed toward the Ohio River; so he started looking along the river in the West Virginia Panhandle, south from Wheeling. A study of old oil-well drilling logs showed the presence of rock salt at a depth of about 7,000 ft. He and his crew outlined



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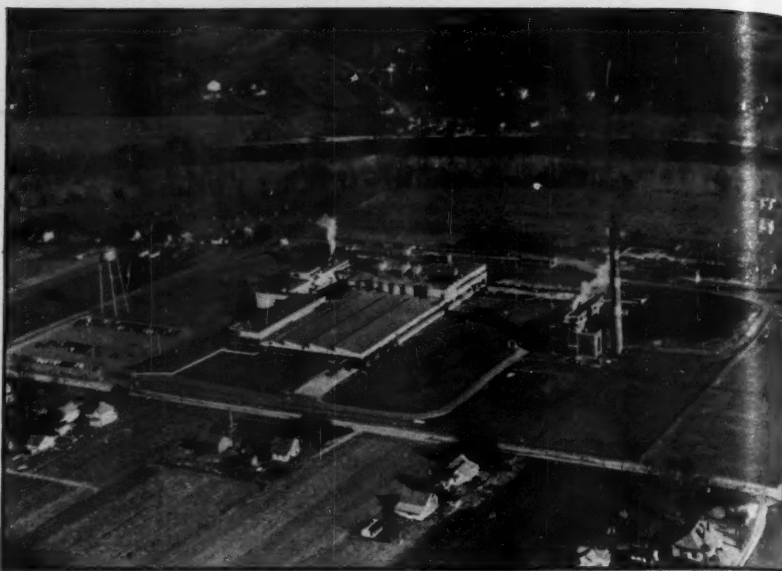
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GENERAL ELECTRIC



RECENT IMMIGRANTS: B. F. Goodrich picked a spot near Marietta, Ohio, for its new plastics plant (top); American Cyanamid's Calco Division chose St. Marys, W. Va. (bottom)



the probable extent of the deposit, then looked for a spot which also offered coal and transport. Aided by Mayor Robert L. Bruce of New Martinsville, W. Va., they picked a spot just north of that city. Means dubbed the nonexistent town Natrium (the Latin word for sodium).

• **Government Prod**—About this time the War Dept. was asking industry to expand its capacity to produce chlorine and caustic soda, and promising to help defray expenses. So Columbia Chemical took its plans for the new plant to Washington.

Construction started in 1942; by mid-1943 the Natrium plant was in operation, turning out chlorine, caustic, and hydrogen. When construction started, Means hadn't proved there actually was

salt directly beneath, although he was certain it would be available somewhere within a 15-mi. radius of the plant. The first well hit salt just where Means predicted it, at 6,800 feet. A 120-foot blanket of it was ready for use the day the plant was finished.

At the end of the war, Columbia bought the plant from the government. In the past two years, capacity has been increased 25%. And a new plant is now going up alongside the first; it will take the Natrium operation one step further—into chlorobenzenes. The benzene it needs as a raw material will come from the Wheeling coke plant.

• **Advantages**—Salt, of course, is only one factor responsible for the valley's industrial boom. Among the others:

SECURITY from air attack. The industrial

"I used to wish  
I were twins...  
and now I  
think I am!"



"Just a small manufacturer, that's me. No branch offices . . . no sales force. Rounding up business used to keep me hopping all over the country. Finally, it looked like I'd have to choose between the road and the office."



"That's when the TWA representative caught up with me (thank goodness!). He showed me how TWA's round-the-clock schedules to major business areas just fit my needs. 'Why, it's almost like personal charter service,' he explained."



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BIG STEEL MILLS nearby—an important factor now that the steel industry has returned to f.o.b. pricing.

CHEAP LAND, and promoters who work on a nonprofit basis to bring big industry to the valley.

• **Smoke**—First to follow Pittsburgh Plate into the area was the War Dept. itself. It put up a chemical-smoke plant right next to the Columbia works, at Natrium. As its basic raw material, it used the chlorine from next door.

This plant was closed down at the end of the war, and put into the government's industrial reserve. Today, however, it is being operated again, by Glyco Products Co. It is turning out chlorine compounds and esters of fatty acids.

• **Interest**—The ease with which these two chemical plants avoided the wartime labor, raw-materials, and transport bottlenecks soon brought interested site-seekers from other chemical companies along the crowded East coast.

American Cyanamid and du Pont looked around, liked what they saw, and settled down.

The Calco Division of American Cyanamid picked a site near St. Marys, W. Va. Du Pont started construction in 1946 on the Washington tract, a short



PIONEER: Dwight R. Means picked the valley for Pittsburgh Plate's new plant



## "Getting so you can't tell the customers from the common people..."

Just was put in my place, or something —by Perk, a young guy in our service department... a genius practically with machines, but no more personality than a week-old baking powder biscuit!

Week before last, we sent him down to Lake City to install an RH in a wholesale drug outfit. You go to Edger to pick up the Lake City bus. A flock of passengers were waiting in the bus station at Edger.

A big heavy-set man, with white hair and saddle leather skin, noticed the case Perk was carrying.

"What you sellin', pardner?" he asks.

Perk said he wasn't selling anything—was a service man for Pitney-Bowes postage meters. The old fellow wanted to know what was a postage meter. Perk took the RH out of the case, and started to tell him.

According to Perk, the postage meter outclasses the atom bomb a little—and is more useful. It has freed business from the petty tyranny of the adhesive stamp, all the stamp licking and sticking!

Perk explained how the meter prints a stamp, a dated postmark and a small

advertising panel directly on the envelope—and seals the flap at the same time... how you flick a lever to get any amount of postage you need, for any kind of mail including parcel post.

He also told about the convenience of always available postage... the protection postage gets from damage, loss or misuse... automatic postage accounting... how efficient metered mailing is in time and effort saved... and how metered mail doesn't get held in the postoffice for postmarking and cancelling—can make earlier planes and trains.

When he finished, Perk found out he had an audience. The big man says:

"Next time you come over to Lake City, bring a meter for me," and gave Perk his card—turned out to be a distributor for drills and oil field equipment.

Another man, all duded up in fancy Western clothes like a radio station cowboy asked if Pitney-Bowes had a L. A. office. Week later, our Los Angeles office got an order for three RH's from a clothing chain

...and credit for the sale to Mr. Perkins of this branch!

I ask Perk did he want to make a switch to selling?

"No future in it," Perk says. "Pretty soon postage meters will be so well known, people will call in orders. But somebody will always have to install 'em. I'll stick with the service department!"

I have been selling postage meters, man and branch manager, since Calvin Coolidge was a name to conjure with. The first postage meter was a high-speed, heavy duty, high-priced job that took a lot of selling! Smaller models and lower prices made easier selling. But to have a kid service man tell me postage meters wouldn't need selling... was a shock, kind of belittlin'!

THERE isn't any question today that every office can use a postage meter... The Pitney-Bowes man can tell you the meter model best for your needs... Call the nearest PB office, or write direct for the new illustrated booklet "So You Have No Mailing Problems?"



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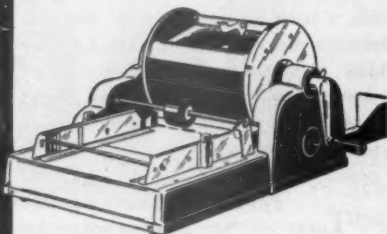


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distance from Parkersburg. The plant went into operation early this year.

• **Clincher**—It was water, not salt, that sold Calco on the St. Marys site. The home plant, at Bound Brook, N. J., was getting crowded. It was hard to dispose of the effluent from some of the company's processes, and labor was getting scarce. The Ohio offered an unlimited water supply, and there was enough land available to allow a modern pollution-control system.

The plant was started in 1946, was finished this year. It is turning out basic pharmaceuticals, pigments, and plastics. Many of the plant's customers are or will be in the valley.

Du Pont liked the combination of plenty of water, an abundant labor force, and the short haul by rail or barge to the company's basic-chemicals plant at Bell, W. Va., 100 mi. away. The Parkersburg plant is turning out semi-finished Nylon, and acrylic plastics. Expansion plans are already being talked.

• **Goodrich Plastics**—B. F. Goodrich surveyed 150 localities, from New York State to the Carolinas, before it settled on a site near Marietta, Ohio, for its plastics division. Crowding at the home plant caused this migration, too.

Cheap fuel and electric power, plentiful water and manpower, and a location in the middle of the market area were the reasons for the Marietta decision. The plant is turning out semifinished "PVC" plastics of various shapes and sizes.

• **Coming**—Soon to be built are multi-million-dollar plants for Electro Metallurgical Co., Bakelite Corp., and National Carbon Co.—all subsidiaries of Union Carbide & Carbon Corp.—between Marietta and Parkersburg; Industrial Rayon Corp., near Pt. Pleasant, W. Va.; Dow Chemical Co., near Iron-

ton, Ohio; and Wyandotte Chemical Corp., at Dilles Bottom, Ohio, 10 mi. south of Wheeling.

Still in the looking stage are Monsanto Chemical Co., Carbology division of General Electric Co., and, rumor has it, Procter & Gamble Co.

• **What's New**—Why the chemical industry, or some other, didn't move into the valley before is a mystery to the area's promoters. Mayor Bruce of New Martinsville, who is given much of the credit for the valley's development, points out that the natural and human resources have always been there. Hardly anything new has been added in half a century, he says.

The one thing which promises to be of importance is the Supreme Court's basing-point decision, and the resulting return of the steel industry to f.o.b. pricing. This makes the valley, with its cheap river traffic, a natural for steel fabricators who decide to move closer to the source of their raw material. Wheeling steel is nearby; Pittsburgh is less than 100 mi. upriver.

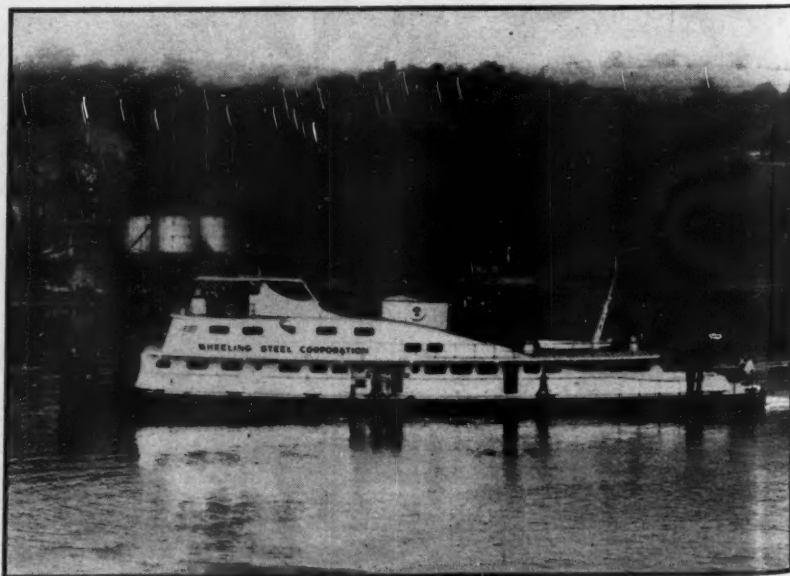
For this reason, advance guards from several interested industrial groups are already quietly surveying the area around Wheeling.

• **Good Labor**—Labor in the region is plentiful; in fact, there is a slight surplus all along the river, both in West Virginia and Ohio.

F. D. Dean, manager, and E. L. Plening, service superintendent, of the Du Pont plant at Parkersburg, figured on about 5% absenteeism and a fairly heavy turnover in labor when they first started to recruit the plant force.

To their amazement, absenteeism is running about 1%; turnover is about the same.

• **Power**—Utilities in the valley are keeping ahead of electric-power demand by



STEEL BY BARGE along the Ohio is one of the valley's big inducements to new plants

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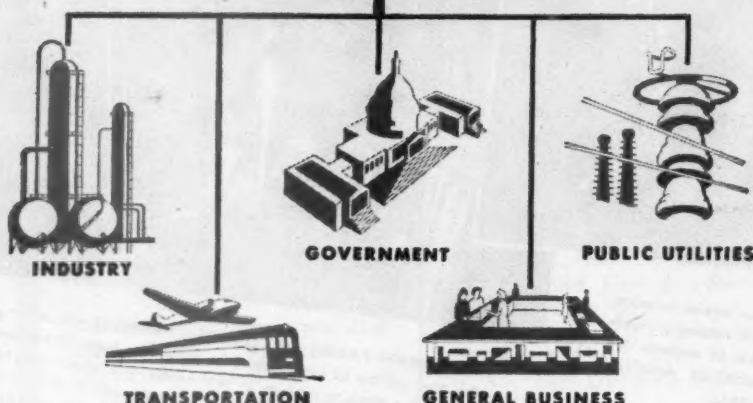
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**VALLEY BOOSTER:** Mayor Robert L. Bruce, of New Martinsville, W. Va.

paralleling the new plant construction with expansion of generating capacity.

In the northern end of the area, around Wheeling, the Ohio Power Co.'s new Tidd plant, completed in 1945, recently increased its capacity to 220,000 kw.

American Gas & Electric Service Corp. is building a new plant in the southern end of the valley, at Graham Station, near Pt. Pleasant. The first of four 137,500-kw. units is scheduled for operation next July. All four will be in operation by December, 1951.

• **Expansion**—Ohio Public Service Co.'s Burger Plant, at Dilles Bottom, Ohio, below Wheeling, is adding 120,000 kw. to its present 100,000-kw. capacity. Completion is scheduled for June, 1950.

The Toronto plant of Ohio Edison Co., which now has 175,000 kw. of capacity, will soon have two additional 60,000-kw. units. The first will go on the line next September; the second will be in operation by March, 1950.

Monongahela Power Co., serving the central portion of the valley, will have its new 50,000-kw. station at Willow Island in operation next spring.

• **Fuel**—Coal, particularly heating and steam grades, is abundant all along the river. The coking grades are available further east in West Virginia.

Natural-gas wells dot the area; in addition, the main pipelines from the great western and southwestern fields run through it.

Oil is pumped and refined locally and is also barged along the river. The Burning Springs field in Wirt County dates back to 1860.

• **Raw Materials**—Industrial raw materials available in the valley include chlorine, caustic soda, hydrogen, steel of all types (from Pittsburgh and Wheeling by barge), acids, ammonia, alcohol, benzene, coal-tar products, coke, most

types and forms of thermoplastics, plasticizers, and most basic chemicals (either locally, or 100 mi. away, at Charleston).

The new plants coming in will add such things as ferro-alloys, rayon cord and yarns, soda ash, more alkalies, and other basic chemical compounds.

• **Need**—A manufacturer of calcium carbide would be welcomed to the area, and would have a sizable list of customers. Carbide for steel mills and other users in the area is now hauled from Ashtabula, Ohio, more than 100 mi. to the north.

Hydrogen, basic to many manufacturing processes, is going to waste in this area. Columbia, which makes it as a byproduct of chlorine and caustic soda, is burning it as fuel at Natrium. Columbia is thinking of installing a synthetic-ammonia plant to use it. But it would rather supply the gas to someone else by pipeline.

• **Promotion**—Businessmen in the valley have been doing their best to boost its industrial expansion. One group, in Wheeling, first became active in 1926. Department-store owners, steel makers, publishers, utilities, and the Board of Trade formed the Ohio Valley Industrial Corp., a nonprofit enterprise with a promotion capital of \$2-million.

The initial efforts of this group resulted in a spurt of new industry in the late 20's and early 30's in and around Wheeling. Some of the newcomers prospered; some failed.

• **Land**—Just before the war, O.V.I.C. started buying or optioning tracts of land suitable for "big" industry. The corporation owns outright several tracts of land, ranging from a few acres to over 100.

O.V.I.C. land is sold to new industry at cost. This eliminates one of the bugaboos to any newcomer—the land speculator. Goodyear Tire & Rubber Co. had to give up a site a few miles south of Wheeling because of a "land grab," according to O.V.I.C.

• **Live Wires**—The promotional group centers in "The Live Wires"—a small group of businessmen. It is headed by F. Leslie Body, general manager of the Ohio Valley Board of Trade for the past nine years. Body, like Bruce, has done much to help new industry find its spot in the valley.

In the center of the valley, at Parkersburg, is another civic group, the Little Kanawha Regional Council. This outfit is promoting the advantages to be found in eight western and southern West Virginia counties.

The utilities, too, have been active in promoting the valley. American Gas & Electric, for instance, contributed heavy advertising campaigns in the national business press, plus three widely distributed booklets on "Resourceful Valley."

## "Your Hoists Run 11 Hours a Day, 7 Days a Week . . . Without Maintenance!"

"We like Whiting electric hoists! Our men find they operate easily and safely . . . carrying work to any desired spot. What's more, operating cost is low—so far we have had no maintenance expense. In short, Whiting electric hoists fit our handling problems very satisfactorily."

C. B. Soderquist  
President and Manager  
Motor Truck Equipment Co.

Plant managers all over the country are cutting costs by moving their heavy loads with the new Whiting electric hoist. They've found that this hoist will handle loads up to one ton, 13 times as fast as a hand hoist . . . releasing men and machines for productive work. Whiting hoists can be installed by one man, yet are so rugged they will stand up under heavy duty. Find out how they can save money for you.



**ONE-TON SIZE  
COSTS ONLY  
\$230<sup>00</sup>**  
F. O. B.  
HARVEY,  
ILLINOIS

**If it Saves One Man Only 12 Minutes a Day...IT PAYS A PROFIT!**

## WHITING ELECTRIC HOISTS

Write for Bulletin H-100A

### WHITING CORPORATION

15661 Lathrop Ave., Harvey, Illinois

- ☐ Send me a copy of your Bulletin H-100A describing the new Whiting electric hoist.
- ☐ Please send me the name of the Whiting distributor in my territory who can give me immediate delivery on a Whiting hoist.

NAME \_\_\_\_\_

STREET ADDRESS \_\_\_\_\_

CITY \_\_\_\_\_

STATE \_\_\_\_\_

**4 SIZES  
1/4, 1/2, 1,  
and  
2-TON**



# FINANCE

## Where Do Small Firms Get Capital?

It's not so hard to find as you would think, bank survey shows. Proprietors' savings, friends "loans" are primary sources.

Has small business three strikes against it from the start? Many fiscal experts have long thought so. Here they are:

- **Strike One:** Proprietors are persistently plagued with shortages of equity capital.

- **Strike Two:** They have to resort to costly short-term bank and credit-company loans to meet "permanent" working-capital needs.

- **Strike Three:** They have to make too extensive use of trade credit.

The fact remains, small business is far from out. And while most of the authorities can scratch up some pretty valid-looking data on the perils of small business, there are prominent dissenters.

- **New Light—**The Minneapolis Federal Reserve Bank is one. The bank recently decided to take a fresh look at the small-business picture. As a result, it doubts that now, at any rate, such sweeping statements can be made to stick—without proper qualification.

It can back up this skepticism with fresh data. These are the findings of a study, just completed, on "the sources of equity and borrowed capital for the initiation and growth of small business" in its area. This covered, in all, 122 small "local" enterprises.

- **Findings—**Here are some of the bank's main conclusions:

- Although "all entrepreneurs do not have an equal opportunity to secure venture capital, . . . the number . . . of firms not started for lack of capital probably is not so large as estimated by some observers."

- The "primary sources of equity capital (for small business) stem from personal savings," and "since V-J Day there has been a sufficient supply of capital to permit a rapid growth in . . . (such) . . . enterprises."

- **Initial Capital—**In 73% of all companies the bank studied, the proprietor put up his own savings to start his business. Relatives and friends were the next important new-capital source; they contributed to the original equity capital of some 20% of the companies. The capital of the rest came mostly from established business concerns. In only a few cases was it supplied by local capitalists or by stock sales in the security market.

In dollars, too, proprietor-savings proved the largest source of initial capital needs. Friends and relatives, the

second most frequently used capital-source, actually contributed only a small amount of cash in the aggregate. Other business houses, capitalists, and the security market put up a much fatter purse.

The bank found that small businesses were apt to blur the line between equity and borrowed capital. Often what they first described as "equity capital," furnished by relatives and friends, actually proved "borrowed money."

In effect, however, many of these loans from friends were "equity capital" in all but the strict sense of the word. The business didn't have to pay interest, for example, until it was making a profit; it could also put off the payment of such loans until it no longer needed them. Thus, such lenders ran about the same risk a furnisher of actual equity-capital would incur.

- **Capital Structure—**Altogether, 104 enterprises reported the details of their initial capital structures. Combined, they managed to start off with over \$5-million of equity capital, less than \$300,000 of long-term loans, less than \$100,000 of short-term borrowed capital.

Of the \$400,000 of borrowed capital, over half came from commercial banks. Physical assets were generally pledged to secure it; often personal property of the proprietor (homes, farms, and the like) had to be pledged, too. The rest came from relatives and friends; from local capital pools; from tool and equipment suppliers. Some short-term loans also came from finance companies, the survey shows.

Bank borrowings were negotiated at the going rate. But companies that had to scratch up funds elsewhere often paid excessive interest rates.

- **Expansion—**Once you've successfully launched a new business, how does it grow? Through retained earnings, primarily, the bank learned. Then, if the outfit continues to prosper, it seems to have not too much trouble getting either (1) long-term loans from banks, or the like, to help it expand, or (2) similar short-term advances to handle its temporary or seasonal, working-capital needs.

For the business that doesn't do so well, the going is rougher, the study indicated. Some repeat borrowers could get what they needed from banks; others had to tap merchandise suppliers,

finance companies, as a last resort, friends and relatives.

The sale of securities doesn't seem to have totted up much for the small business. Over the years, the small business has never been able to sell publicly quite as much new stock as it had hoped.

- **Capital Shortages—**Some executives interviewed seemed to feel that capital shortages had stunted their company's growth. They could recall many times when their credit requests had been turned down—for want of sufficient collateral or an established business record.

To offset this, it was found that how much capital a small business has isn't necessarily the controlling factor in its expansion plans. Far more potent is the entrepreneur's confidence in himself. Most newcomers like to wait until they have this confidence before they risk any expansion steps. Quite a few of those interviewed recalled grave management boners they had pulled. They recognized that if these mistakes had occurred in the midst of a big expansion the companies might have wound up in a receiver's hands.

- **Protection—**The study covered some firms that "under normal conditions would not be in business." Many firms that ordinarily would be classified as submarginal outfits are now making profits—thanks to the recent boom in process.

Thus, refusal of credit to the normally submarginal group doesn't necessarily mean that shortages of small-business capital are developing. It seems to mean this, instead: The sources of such capital aren't going overboard on today's temporary prosperity; they aren't throwing out their normal discriminating lending policies.

- **Adverse Factors—**The Minneapolis bank does find several factors in today's picture that could work against small business.

For one thing, it doesn't like the recent great reliance of small business on personal savings for its equity capital needs. This primary new-capital source could dry up materially, and fast, if the rate of personal savings drops close to prewar levels.

It doesn't like, either, the substantial contribution of "temporary" inventory profits to small business profits.

The uneven, and unhealthy, distribution of equity capital available for small business can be traced to this fact, the bank thinks. There's no organized new-money market for the small-business group.



#### LIQUID COAL — the oil of the future

The synthesis of oil from coal and natural gas promises an answer to the alarming problem posed by the rapid depletion of our petroleum reserves. C-E steam generating and heat transfer equipment is importantly identified with this program.



#### BLACK LIQUOR is big business

C-E Recovery Units save the Kraft paper industry millions of dollars annually by recovering chemicals from the spent liquor of the pulp-making process, and generating steam from the combustible ingredients of the liquor.

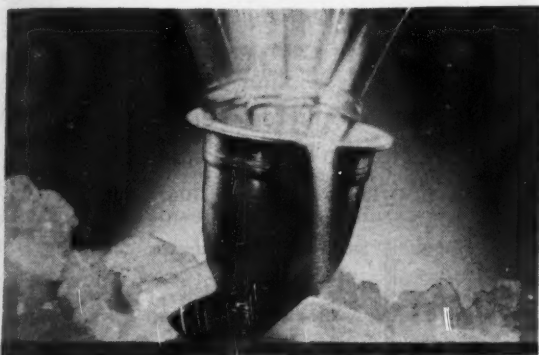
**Not such  
strange  
bedfellows**

#### PULVERIZING the materials of industry

The principles of pulverization developed for C-E Pulverized Coal Systems are used for the efficient reduction to powder of a host of products for home and industry — from foods and cosmetics to plastics and metallic ores.

#### SOAKING WET TO BONE DRY in split seconds

C-E Flash Drying Systems make many water logged wastes into usable fuel, changing a disposal problem to a profitable operation. So, too, in the process industries many valuable products from which moisture must be removed are dried almost instantly.



**T**o those of you who associate the C-E trade mark with boilers — for industry, for public utility stations, or for ships — the apparently unrelated processes pictured above may seem to be strange bedfellows.

But to many the C-E flame means some special field of activity like one of those here illustrated, or such others as domestic water heaters, pressure vessels for the process industries, or the drying and incineration of sewage sludge.

The point is that all these seemingly diverse C-E activities have a common kinship in Combustion's primary field — the efficient generation and use of heat. And all benefit by more than 60 years of experience in this field symbolized by the C-E flame.



## COMBUSTION ENGINEERING

300 MADISON AVE. • NEW YORK 16, N. Y.

C-E Products include all types of Boilers  
Furnaces • Pulverized Fuel Systems • Stokers  
Superheaters • Economizers • Air Heaters.  
Also, Pressure Vessels • Chemical Recovery  
Equipment • Sewage Incineration • Flash  
Drying Systems • Domestic Water Heaters

*"Victors are  
a must!"*



says J. W. MILLER, President of

**MID-CONTINENT AIRLINES, INC.**

*"Just as air travel has proved a great convenience and a necessity in the Mid-Continent area, so have Victor Adding Machines proved a must in the mass of figure work required by Mid-Continent Airlines, Inc."*

Model 6-83-54  
Also in 10-key  
keyboard



Add, subtract, multiply, or compute credit balance—there's a versatile Victor for every business . . . large or small. Choice of ten-key or full-keyboard, hand or electric models.

Cushioned feather-touch keys for speed, accuracy. Anyone can operate. Compact . . . easily carried. Fully guaranteed. Nationwide service points.

Call your Victor dealer for a demonstration. Consult your classified phone directory, or write for address.

**VICTOR**  
ADDING MACHINE CO.

World's Largest Exclusive Manufacturers of  
Adding Machines—Now in Our Thirtieth Year

Victor Adding Machine Co.  
Dept. BW-12-11 Chicago 18, Illinois  
Please send prices and information on  
the Victor line of adding machines.

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Address \_\_\_\_\_  
City \_\_\_\_\_ State \_\_\_\_\_

The Typical Manufacturing Company, Inc.  
**CONSOLIDATED BALANCE SHEET—DECEMBER 31, 1946**

ITEM	ASSETS	ITEM	LIABILITIES
1 CURRENT ASSETS:		16 CURRENT LIABILITIES:	
2 Cash .....	\$ 2,000,000	17 Accounts Payable .....	\$ 300,000
3 U. S. Government Securities .....	1,000,000	18 Accrued Taxes .....	800,000
4 Accounts Receivable (less reserves) .....	2,000,000	19 Accrued Wages, Interest and other Expenses .....	370,000
5 Inventories (at lower of cost or market) .....	2,000,000	20 TOTAL CURRENT LIABILITIES .....	\$ 1,470,000
6 TOTAL CURRENT ASSETS .....	\$ 7,000,000	21 FIRST MORTGAGE SINKING FUND BONDS, 3½% DUE 1966 .....	2,000,000
7 INVESTMENT IN AFFILIATED COMPANY—Not consolidated (at cost, not in excess of net assets) .....	200,000	22 RESERVE FOR CONTINGENCIES .....	200,000
8 OTHER INVESTMENTS—AT COST, less than market .....	100,000	23 CAPITAL STOCK:	
9 PLANT IMPROVEMENT FUND .....	550,000	24 5% Preferred Stock (authorized and issued 10,000 shares of \$100 par value) .....	1,000,000
10 PROPERTY, PLANT AND EQUIPMENT:		25 Common Stock (authorized and issued 400,000 shares of no par value) .....	1,000,000 2,000,000
Cost .....	\$8,000,000		
11 Less Reserve for Depreciation .....	5,000,000	26 SURPLUS:	
12 NET PROPERTY .....	\$ 3,000,000	27 Earned .....	\$3,530,000
13 PREPAYMENTS .....	50,000	28 Capital (arising from sale of common capital stock at price in excess of stated value) .....	1,900,000 5,430,000
14 DEFERRED CHARGES .....	100,000	TOTAL .....	\$11,100,000
15 PATENTS AND GOODWILL .....	100,000		
TOTAL .....	\$11,100,000		

The Typical Manufacturing Company, Inc.  
**CONSOLIDATED INCOME AND EARNED SURPLUS**  
For the Year Ended December 31, 1946

ITEM		ITEM	
a NET SALES .....	\$10,000,000	m INTEREST CHARGES:	
b COST OF SALES, EXPENSES AND OTHER OPERATING CHARGES:		n Interest on Funded Debt .....	\$ 70,000
c Cost of Goods Sold .....	\$7,000,000	o Other Interest .....	20,000 90,000
d Selling, Administrative and General Expenses .....	500,000	p NET INCOME BEFORE PROVISION FOR FEDERAL INCOME TAXES .....	\$1,785,000
e Depreciation .....	200,000	q PROVISION FOR FEDERAL INCOME TAXES .....	678,300
f Maintenance and Repairs .....	400,000	r NET INCOME .....	\$1,106,700
g Taxes (Other Than Federal Income Taxes) .....	300,000	s DIVIDENDS:	
h NET PROFIT FROM OPERATIONS .....	\$1,600,000	t Preferred Stock—\$5.00 Per Share .....	\$ 50,000
i OTHER INCOME:		u Common Stock—\$1.00 Per Share .....	400,000
j Royalties and Dividends .....	\$ 230,000	v PROVISION FOR CONTINGENCIES .....	200,000 550,000
k Interest .....	25,000 275,000	w BALANCE CARRIED TO EARNED SURPLUS .....	\$ 456,700
l TOTAL .....	\$1,875,000	x EARNED SURPLUS—JANUARY 1, 1946 .....	3,073,300
		y EARNED SURPLUS—DECEMBER 31, 1946 .....	\$3,530,000

## Making Sense of Reports

Brokerage house Merrill Lynch, Pierce, Fenner & Beane again starts promoting its booklet, *How to Read a Financial Report*. It explains workings of annual reports in simple terms.

Have you ever been hard put to it to explain your company's annual report to a small investor in simple, nontechnical language?

As a brokerage house that specializes in helping the average investor, Merrill Lynch, Pierce, Fenner & Beane thinks it has an answer to this problem. It is a simply written booklet of 25 pages—*How to Read a Financial Report*. Its purpose: to help the man who owns 25 shares of G. E. Common swim through the seas of seven- and eight-digit figures and get something out of them.

• **Retake**—The booklet first came out early in 1947, and was advertised in a series of Merrill Lynch ads. It turned out to be so popular that it has carried itself on its own steam ever since. This week, however, with the seasonal flood of annual reports as sure to come as Christmas bills, Merrill Lynch started to advertise it again.

The booklet does its work by taking up first the balance sheet, then the



earnings statement, of the Typical Mfg. Co.

• **Finding the Significance**—The balance sheet, the booklet points out, tests the fundamental soundness of a company. "It's true," it adds, that this sheet "doesn't tell much until it is analyzed. Fortunately we can make a balance sheet tell its story without too much effort—often an extremely reveal-

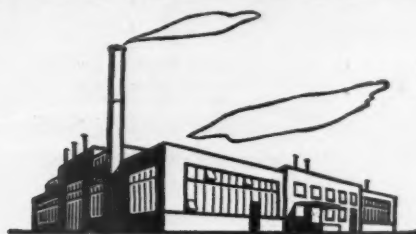
# What one organization can . . . . .

1. **STONE & WEBSTER ENGINEERING CORPORATION** and **E. B. BADGER & SONS COMPANY**. Complete design and construction services for power, industrial and process projects are furnished by these two organizations. Construction is also undertaken from plans developed by others; engineering reports, business examinations and appraisals are made... services likewise include consulting engineering work in the industrial and utility fields.

2. **STONE & WEBSTER SERVICE CORPORATION** is that part of the organization which supplies advisory services for the operation and development of public utilities, transportation companies and industries.

3. **STONE & WEBSTER SECURITIES CORPORATION** is an investment banking organization. It furnishes comprehensive financial services to issuers of securities and investors; underwriting, and distributing at wholesale and retail, corporate, government and municipal bonds, as well as preferred and common stocks.

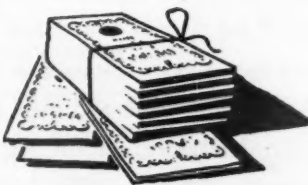
The business of the parent company also includes investments in enterprises to which it can constructively contribute capital . . . substantial enterprises ready to take advantage of present opportunities or not yet ready for public financing.



**construct a  
steel foundry?**



**assist in  
its management?**



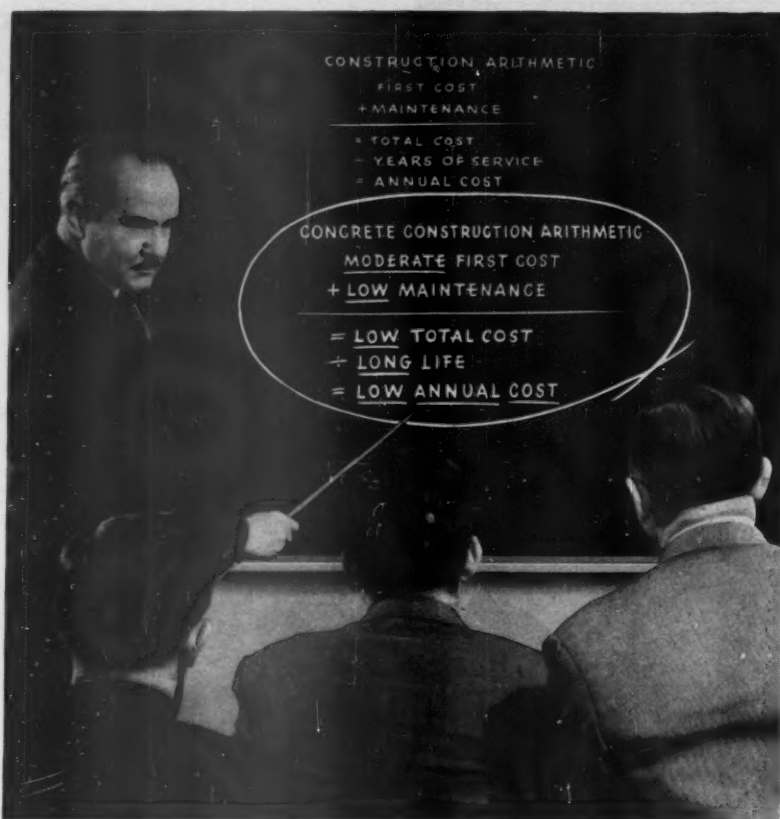
**finance  
its construction?**

## answer:

Stone & Webster, Incorporated . . . through separate corporations under its general direction. Singly, or in combination, they are available to American industry — bringing the long-established standards of Stone & Webster performance to the fields of engineering, finance and business operation.

**STONE & WEBSTER, INCORPORATED**  
NEW YORK 4, N. Y.      BOSTON 7, MASS.





**Y**ou don't charge off the price of a factory, a machine, an automobile or a house in one year. Instead you add to the original price the cost of all the maintenance and then divide that sum by the years of service that the factory, machine, car or house has given you. The result is the *annual cost*, and that is the important cost.

When you build with concrete you get **low-annual-cost** construction. Concrete lasts longer and costs less to maintain, so actually costs less per year to own. This is true whether you build a modern pavement, a hospital, a school, a factory, an office building, a home, a sewer line or a firesafe barn.

Concrete is the preferred structural material for buildings of all kinds because, besides being economical, it is firesafe, durable and resistant to storm and decay. It is also the modern structural material that can be molded into enduring edifices of great beauty.

So whatever you plan to build be sure to choose concrete for its firesafety, durability and **low annual cost**.

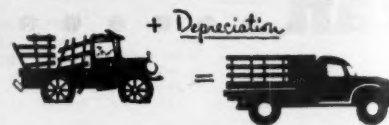
## PORTLAND CEMENT ASSOCIATION

33 W. Grand Avenue, Chicago 10, Illinois

A national organization to improve and extend the uses of portland cement and concrete . . . through scientific research and engineering field work

ing story, particularly if we compare the records of several years." Investors should not worry that figures might be padded either. There is "no substantial ground for skepticism" of balance sheets now that such things are under strict government regulation.

The booklet tells the story of its sample balance sheet by defining and illustrating what each item means, and by showing how it should be analyzed. Fixed assets (item 10), for example, are defined as value of land, buildings, and machinery, and such movables as trucks, furniture, and hand tools.



Depreciation is defined this way: "If a truck costs \$4,000 and is expected to last four years, it will be depreciated at the rate of \$1,000 a year."

• **Cautions**—A typical caution: "You must be careful not to be misled by book value figures, particularly of common stocks," which companies place on securities they own (item 8). Some companies show them high; some show them low. The same applies to values placed on goodwill, patents, trademarks, etc. (item 15). (Example: In 1946 American Tobacco showed \$54,009,431 in this column; Reynolds Tobacco showed \$1).

One important thing a reader can figure from the balance sheet is the net working capital. This is done simply by subtracting current liabilities (item 20) from current assets (item 6). Says the booklet: "If you consider yourself an investor rather than a speculator, you should always insist that any company in which you invest have a comfortable amount of working capital."

• **Finding the "Ratio"**—Another significant figure for the investor is the "current ratio" of assets to liabilities. This is reached by dividing the assets by the liabilities, and in the case of Typical Mfg. Co. comes out to 4.76. In the case of five typical industrial companies in 1946, ratios ranged all the way from 1.99 (the average for ten railroads) to 4.10 (the average for five tobacco companies).

The variation, says the booklet, "is due to the difference in the character of the business. Generally, companies that have a small inventory and easily collectible 'accounts receivable' can operate safely with a lower current ratio than those companies which have a greater proportion of their current assets in inventory and sell their products on credit."

• **Interpreting Earnings**—The second part of a company's tally sheet is its earnings statement, or record of operations. This is sometimes called the

# OKAY— but what's in it for me?



"So America's the richest country in the world. So what?

"So Americans *produce* more than any people on earth. Okay—but what's in it for me?"

At all times, in all ages, nations have had to answer that question—or go out of business.

The average man—the worker, the farmer, the small businessman—is human enough to ask: "What will it do for *me*—for me and my wife and my kids?"

## Let's look at the record—

Here in America we have the best answer in the world to that question.

**Machine Power:** Since 1910 we have increased our supply of machine power  $4\frac{1}{2}$  times.

**Production:** Since 1910 we have more than doubled the output each of us produces for every hour we work.

**Income:** Since 1910 we have increased our annual income from less than \$2400 per household to about \$4000 (in dollars of the same purchasing power), yet

**Work Hours:** Since 1910 we have cut 18 hours from our average work week—equivalent to two present average work-days.

**BUT THE BEST IS YET**—You're right—things can be even better...and must be better. Right now, everyone admits prices are too high. We still have the threat of boom-and-bust. Our system has faults, yet it has brought more benefits to more people than any other system ever devised.

We can beat the boom and bust cycle. We can have even *better* food, *better* clothing, *better* wages, *better* homes, more leisure, more educational and medical facilities.

We can have all this IF we all continue to *work* together and *share* together...IF we continue to realize that each American's personal standard of living will rise in proportion to how much all Americans produce through better machines, better methods, better teamwork.

And that's about it. What's in it for you depends on what's in it for America.

*Approved for the*

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PAUL C. HOFFMAN, Formerly President, Studebaker Corp.

*Published in the Public Interest by:*  
**YOUNG & RUBICAM INC.**

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PUBLIC POLICY COMMITTEE  
THE ADVERTISING COUNCIL, INC.  
11 West 42nd St., New York 18, N. Y.

#### I want to help

I know that higher wages, lower prices, shorter hours and larger earnings can all result from producing more good for every hour all of us work.

Therefore, I will ask myself how I can work more effectively every hour I am on the job, whether I am an employee, an employer, a professional man or a farmer.

I will encourage those things which help us produce more and add to everyone's prosperity—things like greater use of mechanical power, better machines, better distribution and better collective bargaining.

I will boost the good things in our set-up, and help to get rid of the bad.

I will try to learn all I can about why it is that Americans have more of the good things of life.

Please send me your free booklet, "The Miracle of America" which explains clearly and simply, how a still better living can be had for all, if we all work together.

NAME \_\_\_\_\_

ADDRESS \_\_\_\_\_

OCCUPATION \_\_\_\_\_

**Fireside -  
Furrier -  
Factory -**

*each fares better with*

# TRANE

## heating and air conditioning

domestic



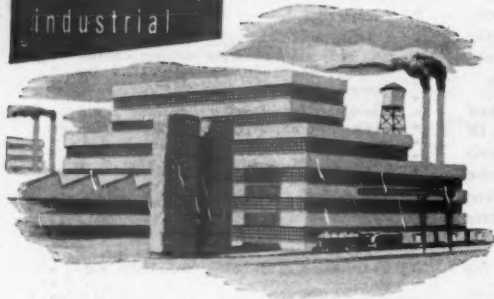
The builders of these beautiful apartment buildings wanted to give tenants the best possible heating, yet costs had to be held down. Trane Convector-radiators were selected for their economy, ideal heating, and individual fingertip control.

commercial



The operators of this large and famous fur store wanted air conditioning for their five-story building, and cooling for their fur storage vaults. They found that a Trane system could be fitted into the building to give them exactly the right conditions.

industrial



When this new plant for producing "juke boxes" was built, large glass areas were installed to provide plenty of light. The huge windows and the skylighted saw-tooth roof presented a heating problem, but a Trane system cut drafts, reduced wasted heat, and gave workers comfort.

There is a Trane System to solve every kind of heating and air conditioning problem efficiently, whether it be comfort or process—domestic, commercial, or industrial. Trane Systems are designed to fit your application by architect, engineer, or contractor. 200 Trane Sales Engineers offer their counsel. *Users' names on request.*

# TRANE

MANUFACTURING ENGINEERS OF  
HEATING and AIR CONDITIONING

THE TRANE COMPANY, LA CROSSE, WISCONSIN  
ALSO, TRANE COMPANY OF CANADA, LTD., TORONTO

income account, or profit-and-loss account. "The income account, like the balance sheet, will tell us a lot more if we make a few detailed comparisons." One important thing is the margin of profit. This can be figured by dividing the net profit from operations (item h) by net sales (item a). But to bring this significance out, the margin must be compared with that of previous years. It must also be compared to that of other companies doing a similar type of business. However, the normal variation between different industries must be kept in mind; in 1946, the average margin of profit of five chemical companies came to 20.5%, while that of 10 railroads was 6.8%. (Typical Mfg. did pretty well with 16%.)



One other thing an investor should know is the earnings-per-share record of a company. This is often more important than the dividends, for in normal times it may influence stock prices. Earnings per share is figured by taking the net income (item r) minus preferred dividends (item t) and dividing it by the number of shares outstanding. For Typical Mfg. this comes to \$2.64.

Finally, the booklet adds a warning about securities as investments. "Investors, as opposed to speculators, are primarily interested in two things." These are safety and regularity of income. "Safety," says the booklet, "must be bought by accepting a lower return."

• **Distribution**—All in all, the home office of Merrill Lynch, Pierce, Fenner & Beane, at 70 Pine St., New York City, has been highly pleased with the reception of the booklet. It distributed some 175,000 copies in 1947, and expects the new advertising campaign to bring in a flood of new orders. So far, 181 universities and colleges over the nation are using the booklet for supplemental reading in financial subjects. And requests have poured in from everywhere—all the way from companies like General Electric (who wanted 200 to use in a training school) to a tenant of the San Francisco jail.



GIRDLES made of Lastex yarn to minimize feminine beauty, and . . .



CONVEYOR BELT for coal in mining operations are just part of . . .

## U. S. Rubber's Two-Way Stretch

Company which was once foundering under heavy debts has righted itself by adding many new items to its tire and tube line. New officers will probably continue diversification policy.

The man who safely steered U. S. Rubber Co. off the financial rocks announced this week that he will turn the wheel over to other hands. At year's end, Francis B. Davis, Jr., 65, will retire as chairman of U. S. Rubber's board, rounding out 20 years as the company's chief executive. Succeeding him as chairman and chief executive officer will be Herbert E. Smith (cover), president since 1942.

• **On the Course**—Financial men expect Smith to follow the course which Davis set: diversification. It was that course which brought the once-foundering company into a preferred position in the rubber industry (box, page 84).

U. S. Rubber had once concentrated on tires and tubes, footwear, and industrial mechanical products. About half its sales still come from tires and tubes. But tire sales have a habit of fluctuating. So like the rest of the industry, U. S. Rubber is diversifying (BW—Sep. 25 '48, p. 21). Of the \$80-million spent since the war for expansion and modernization, \$50-million has gone into nontire products.

For example: U. S. Rubber is now making plastics, chemicals, Lastex yarn, foam latex rubber, textiles, radiant heating panels, golf balls, and bases for perfumes. And there are plenty of other products. Just this week, the company announced that one of its liquid plastics, Kandar, had been adapted for use as a "permanent" cotton clothing starch. Called Perma Starch, it is said to keep

clothes crisp through eight to 10 washings, double their life.

• **Financing**—Along with a new board chairman, U. S. Rubber also will get a new president—Harry E. Humphrey, Jr. A finance man himself, Humphrey will inherit a debt. Up to 1945, U. S. Rubber followed rigorously one of Davis' major objectives—debt reduction at any cost. But to finance its postwar program—now pretty well completed—U. S. Rubber had to drop that policy.

But the debt is nowhere near as serious as it was in 1928. At that time, when du Pont interests first acquired control, funded debt was \$104-million. That was a staggering sum for those days, considering that annual sales were \$193-million in 1928. Bank loans totaled \$25-million.

• **Out of the Hole**—Then Davis came in as president and chairman, fresh from the presidency of du Pont Viscoloid Corp. He found that the company in 1928 paid \$6-million in interest on its bonds. These heavy interest charges—plus heavy inventory losses due to the drop in rubber and tire prices—nearly drove the company to the wall.

But by 1941, Davis had driven the interest on bonds down to \$1.4-million. He had slashed the funded debt to \$38-million, and there were no bank loans. Cash and equivalent stood at \$28.8-million, interest on bonds down to \$1.4-million. 1928.

Bond interest went down as low as \$584,000 in 1945, when bonded debt

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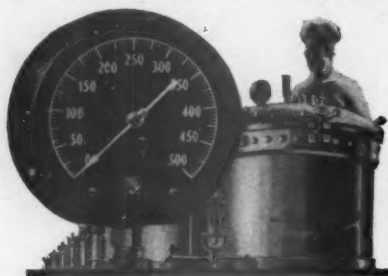
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was \$27-million. Then the company swung into its expansion program. So bonded debt rose to \$101-million in 1947. Yet so far had interest rates dropped, and the company's credit standing improved, that the interest charge was only about \$2.1-million.

• **Decentralization**—A big factor in this improvement is that U. S. Rubber operates on a decentralized basis.

The company has 12 divisions; the chief of each is responsible for development, production, and sales of his own products. About 30,000 rubber items, and several dozen nonrubber products, are made by U. S. Rubber.

• **Tires and Tubes**—Most important of the divisions is, of course, tires and tubes. The company's main tire plant is in Detroit, but there are several others, including one on the West Coast. At present, U. S. Rubber is considered the leading domestic tire and tube producer, though it ranks third in over-all dollar sales. On a cost-plus basis it sells original-equipment tires to General Motors, and sells to Montgomery Ward.

Despite such impressive customers, it's a pretty safe bet that U. S. Rubber's unit sales of tires are below last year. For the industry, estimated 1948 unit tire sales are about 14-million below last year's 97.5-million.

It's to offset just such dips that U. S. Rubber has diversified. Result: Total sales have mounted in each of the first three quarters of this year.

• **Footwear**—The footwear division makes rubber-soled shoes, arctics, boots, and foam rubber cushioning. (Foam rubber is one of the industry's fastest-growing products.) Other products: plastic upholstery, raincoats, bullet-sealing fuel cells for planes.

This division provides a good example of how modernization can cut costs. After Davis took over the company in 1929, he shut down 13 of the company's 14 boot-and-shoe plants. He modernized the one at Naugatuck, Conn., so that it was soon equaling

the entire former output of the company—and doing it much more cheaply.

• **Industrial Products**—U. S. Rubber claims that it makes more articles for industry than any other rubber manufacturer. Its mechanical goods division turns out a lot of them. Six plants in the industrial northeast turn out hoses, beltings, packings, tank lining, wire and cable, motor mountings, and molded articles.

The general products division makes such small but essential items as hot-water bottles, golf balls, shoe parts, gloves, baby pants, rubber sheets, and toys. The Lastex yarn division puts the "two-way stretch" into feminine wear.

• **Chemicals**—The Naugatuck Chemical division dates from 1904. It started by selling sulphuric acid, added aniline oil, and now makes rubber chemicals for the industry. One product, B-L-E, helps rubber resist old age. Combinations of resins and natural or synthetic rubbers have created several plastic products.

These plastics can be used to make nonshatterable casings for everything from radio cabinets to shipping containers. One type is used as a cutting block, instead of wood. This division also makes insecticides, and aromatic bases for perfumes, cosmetics, and soap.

• **Synthetics**—Almost half the rubber used by the company is now synthetic. This is a hedge against variations in the price of natural rubber. (The government-controlled price of synthetic rubber is now 18¢ a lb. Natural is around 22¢.)

As far back as 1923, U. S. Rubber chemists were producing small amounts of synthetic from butadiene, have since developed more than 100 types. Before World War II, a pilot plant had been built at Naugatuck. So the company took a leading role in the huge job of improving synthetic rubber to replace the natural rubber supply, cut off by the Japanese. It operated three synthetic plants and produced a chemical called OEI, which regulates the

## U. S. Rubber: Its Growth in War and Peace

Year	Sales	Profits After Taxes	Working Capital	Capital and Surplus	Book Value Per Share of Common
1939.....	\$195,310,847	\$10,218,849	\$74,509,874	\$102,922,994	\$24.92
1940.....	228,988,780	11,425,241	82,545,272	107,069,863	27.46
1941.....	315,345,328	13,662,657	88,349,919	112,157,589	31.49
1942.....	294,014,268	A8,381,011	103,158,773	114,717,204	32.38
1943.....	434,262,648	A14,163,554	109,435,604	122,313,513	37.40
1944.....	450,734,540	A15,832,613	93,732,772	129,419,587	41.56
1945.....	476,447,431	A13,024,778	110,070,923	134,317,828	43.52
1946.....	496,176,032	23,207,941	118,483,788	145,696,548	52.43
1947.....	581,901,858	21,753,317	170,152,404	155,310,053	58.02
1948.....	B431,930,181	B15,216,798	NA	NA	NA

A After payment of \$112.7-million of 1942-45 income and excess-profits taxes.  
B Last 9 months. NA Not available.

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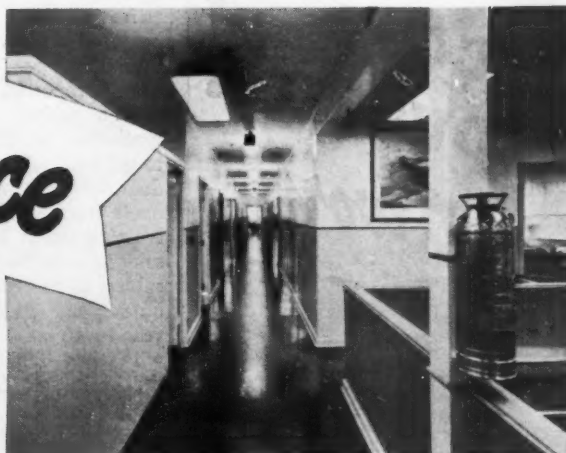
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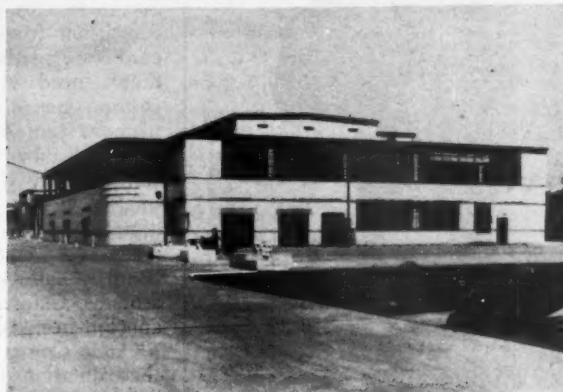
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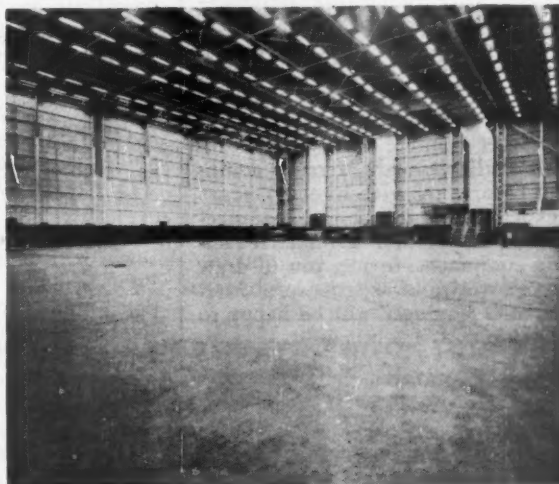
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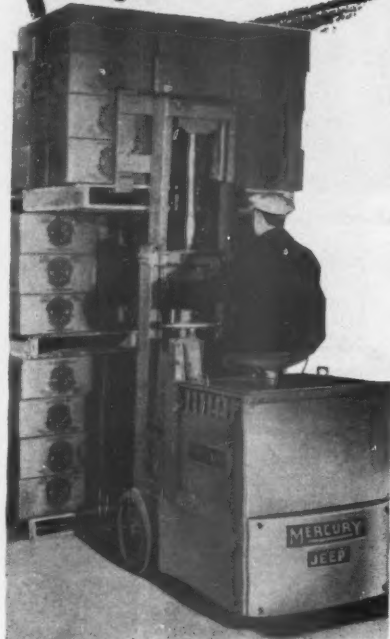
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consistency of synthetic rubber. The company still runs two government-owned plants that make synthetic rubber and synthetic latex. Newest synthetic development is "cold" rubber, whose properties are more like those of natural rubber than the conventional synthetic. U. S. Rubber was the first to get cold rubber into commercial production. Like ordinary synthetic, it is made from butadiene and styrene, but is processed at low temperatures. It is said to wear 30% longer than natural rubber in tire treads. U. S. output will be stepped up from 21,000 tons this year to 183,000 (BW—Oct. 16 '48, p74).

• **Textiles**—The textiles division makes the cord and fabric needed in tires, footwear, and in industrial rubber products. U. S. Rubber's first textile plant began operating in 1917. This fall, it went into the apparel-cloth field (BW—Sep. 18 '48, p28). Reason: The company's conversion from cotton to rayon tire cord left it with extra capacity. Rayon didn't need so much processing as cotton, since it comes to the plants in filament yarn form.

U. S. Rubber developed tough cotton yarns, called Ustex, and Asbestos—a product which combines cotton with asbestos. From the latter, suits are made for firemen, covers for ironing-boards. Latest product is the 20%-asbestos Carosel dishcloth, absorbent and lint-free.

• **Crude Comes Back**—Before the war, the plantation division in Sumatra and British Malaya used to supply U. S. Rubber with about 20% of its crude rubber. The company has started up operations again in Malaya, but the Sumatra plantations are still not back in production.

## Convair Sells Stinson To Piper Aircraft

Floyd Odum has unloaded the consumer part of the aviation empire he's been trying to build around Consolidated Vultee Aircraft Corp. The Stinson Division of Convair has been sold to Piper Aircraft Corp., longtime builders of light airplanes.

• **Profitable**—At least until Odum took over Convair a year ago, Stinson had been a profitable, if small, operation (BW—May 17 '47, p34). It owed this largely to its four-place plane. This put it in a good spot when the juicy part of the postwar light-plane market switched from two-place personal planes to larger business airplanes. Its 1947 sales totaled \$11.5-million.

But Odum wasn't much interested. Most observers think that what he wants is to parlay Convair into a sort of GATX (BW—Dec. 4 '48, p93) of the air-

lanes. He's still trying to get RFC backing for a corporation which would buy Convair and other transports, lease them to airlines (BW—Oct. 2 '48, p89). Stinson didn't fit this pattern, and in recent months production at Wayne, Mich., has been nearly at a standstill.

• **Piper-Stinson?**—By buying Stinson (for around \$3-million, according to trade reports), Piper gets a full-sized four-place plane to help it compete with Cessna and Luscombe for the light-plane market. Stinson manufacture is being moved from Michigan to Lock Haven, Pa., and Piper will probably change its name to Piper-Stinson.

How Piper will finance the purchase hasn't been announced. The company has suffered financially in the postwar period. But in the past few months its sales have recovered somewhat from their earlier slump. And recently it said that it had completely retired the \$600,000 temporary RFC loan incurred in late 1947. Last December, the company issued \$631,118 of notes to creditors to settle accounts payable then outstanding. It is understood that \$521,118 of these notes are still outstanding.

## FINANCE BRIEFS

Tucker Corp. didn't get that \$30-million loan from RFC. Merchandise creditors now want receivers appointed; hearings are next week.

G.E. has just paid off half the \$50-million, five-year, 1.625% bank loan negotiated in November, 1946.

Kaiser-Frazer has a two-months' extension on its \$10-million loan with the Bank of America. K-F. borrowed the money last winter when it had trouble selling new stock (BW—Feb. 21 '48, p85).

R. H. Macy has sold its new Brooklyn store to New York Life for \$4-million. leased the property back for a long term.

Losses from television (BW—Aug. 21 '48, p83) caused the drop in American Broadcasting Co. earnings: only \$440,000 in the first nine months of 1948, as against 1947's \$1,050,000 net.

Life companies' holdings of corporate securities on Sept. 30 (\$18.5-billion) were up (1) \$2.8-billion over Jan. 1; (2) 80% over prewar. And they held more than \$17.6-billion worth of government bonds.

Cash dividend payments publicly reported in October totaled \$474.7-million. Dept. of Commerce says that's 11% more than the same 1947 month

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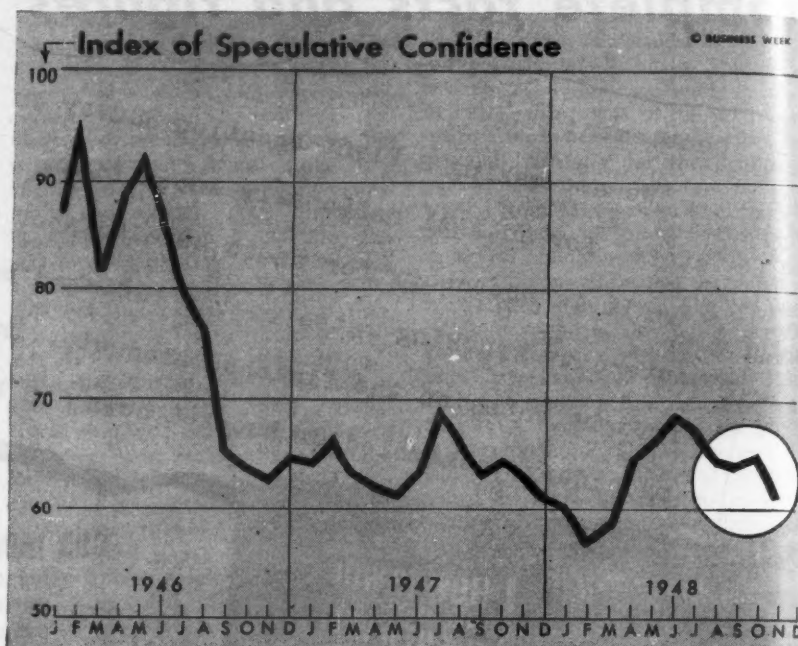


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# THE MARKETS



## Market Sentiment: Down

Confidence ebbs fast as traders worry about possible Truman legislation, tight controls as result of big military budgets, and business dip. Some think stock prices will move up in January.

No one in Wall Street will be sorry to see the end of 1948. It's been a year of bitter disappointments for the stock market.

• **Gloom**—Many traders think 1949 is going to be better. But their hopes don't show up in current stock prices.

There is no yardstick for measuring confidence, of course. But you can get a rough indicator by dividing the BUSINESS WEEK Index of business activity into the Standard & Poor's 90-stock price average. The resulting ratio (chart above) shows how movements in stock

prices compare with the fluctuations in business.

On this basis, speculative confidence has been ebbing fast. At present, it is lower than at any time since March.

Throughout November, business activity was pushing up to new peacetime peaks. Stock prices were washed down in the wave of liquidation that followed President Truman's election victory. As a result, the index of speculative confidence dropped from a 65.2 average in October to 61.3 in November.

• **Headaches**—What is the stock market worrying about? Wall Street opinion shows that the answer is "practically everything."

First of all, traders are afraid of the legislative program that Truman will present to the new Congress. They have duly noted Truman's assurance to business that it has no more to fear from him than it has had for the past three and a half years. They have studied the comforting words that Secretary of Commerce Sawyer voiced to the National Assn. of Manufacturers. And still they are worried.

• **Controls**—Besides that, they are uneasy about the prospect of a big mili-

### Security Price Averages

	This Week	Week Ago	Month Ago	Year Ago
<b>Stocks</b>				
Industrial	151.0	145.7	148.0	146.9
Railroad	43.6	42.3	43.3	39.9
Utility	65.9	65.4	67.3	66.1
<b>Bonds</b>				
Industrial	94.5	94.5	94.5	100.2
Railroad	84.4	84.8	85.1	82.4
Utility	93.8	93.5	93.5	98.1

Data: Standard & Poor's Corp.

tary budget and the tight economic controls that might go with it (page 15). Allocations and price controls would surely play hob with corporate profits. And the high level of profits is about the only thing that gives the stock market any comfort these days.

At the same time, traders are worrying more and more about the possibility of a general business recession. You might think that such thoughts would cancel out their fears about the big military budget that might be put into ef-

fect. But that isn't Street psychology.

• **Hope**—In the past couple of weeks, however, the market's under-pinnings seem to have strengthened a little. Prices have stood up well in spite of the year-end selling for tax purposes. So far the averages have shown no inclination to go on down and make a real test of the old bear market lows.

If Truman's state-of-the-union and budget messages don't look too alarming, traders may take their other worries less seriously.

## A 10-Month Look at Railroad Income

Revenues of Class I railroads zoomed through the \$8-billion level in the first 10 months of 1948. Their total was almost \$1-billion greater than a year ago.

Earnings put on an even more spectacular show. After all charges, they came to some \$590-million vs. \$370-million in January-October, 1947. Full-1948 profits are expected to run somewhere between \$650-million and \$700-million. If they do, 1948 will be the rails' best peacetime earnings year since 1929.

• **Market Chilly**—From the recent price action of their stock, you would never think that the rails were enjoying this prosperity. Twenty actively traded, dividend-paying rail stocks, for example, were selling recently at levels 10% to 37% under their 1948 highs.

There are some good reasons for this apparent paradox.

Many investors, for example, expect that the presidential fact-finding board, now considering the non-operating unions' wage demands, will soon recommend at least a 10¢-per-hour hike. Coupled with a similar raise granted earlier to operating unions, this would lift annual rail payrolls almost \$400-million.

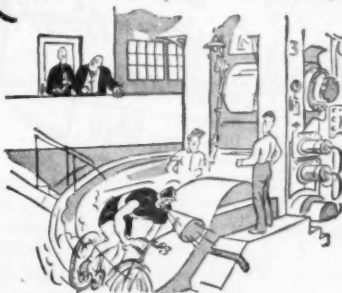
There's growing concern, too, over (1) the board's possible recommendation regarding the nonoperating unions' additional demands for 48-hour pay for a 40-hour week; (2) what the ICC may rule on the freight-rate-increase pleas now before it; and (3) future rail traffic trends, in view of recent drops below 1947 levels.

• **Sampling**—Below is a sampling of individual roads' revenues and profits (000 omitted) for the first ten months in 1947 and 1948:

	Gross Revenues		Net Income	
	1948	1947	1948	1947
Atch., Topeka & Santa Fe.....	\$434,221	\$374,301	\$52,746	\$37,864
Atlantic Coast Line.....	113,647	105,548	6,849	4,116
Baltimore & Ohio.....	354,461	295,894	19,043	6,207
Boston & Maine.....	78,314	69,053	*4,300	*2,437
Chesapeake & Ohio.....	280,485	258,123	27,156	31,124
Chic., Burl. & Quincy.....	200,513	178,997	23,561	23,193
Chic., Milw., St. Paul & Pacific.....	212,289	189,410	**13,536	**13,106
Chicago & North Western.....	162,391	145,512	5,844	3,942
Erie.....	146,628	125,307	11,658	3,897
Great Northern.....	180,194	159,572	21,142	16,588
Gulf, Mobile & Ohio.....	67,248	60,501	5,237	3,306
Illinois Central.....	221,626	199,317	17,101	21,705
Louisville & Nashville.....	173,212	154,679	15,327	10,030
Missouri-Kansas-Texas.....	68,087	56,357	5,185	2,106
New York Central.....	640,890	574,656	14,153	204
New York, Chic. & St. Louis.....	90,757	75,556	12,656	6,343
New York, New Haven & Hartford.....	142,544	128,010	4,441	D1,651
Norfolk & Western.....	154,754	136,162	30,338	25,850
Northern Pacific.....	129,465	115,590	**16,733	**14,310
Pennsylvania.....	832,744	747,635	26,049	D7,294
Southern Pacific.....	489,679	437,355	**44,082	**38,399
Southern Ry.....	204,044	182,692	15,280	8,786
Texas & Pacific.....	64,604	51,685	5,568	4,227
Union Pacific.....	362,789	333,368	56,590	39,814
Wabash.....	89,451	77,613	8,997	5,979

\*—Before contingent interest charges. \*\*—Net railway operating income. D—Deficit.

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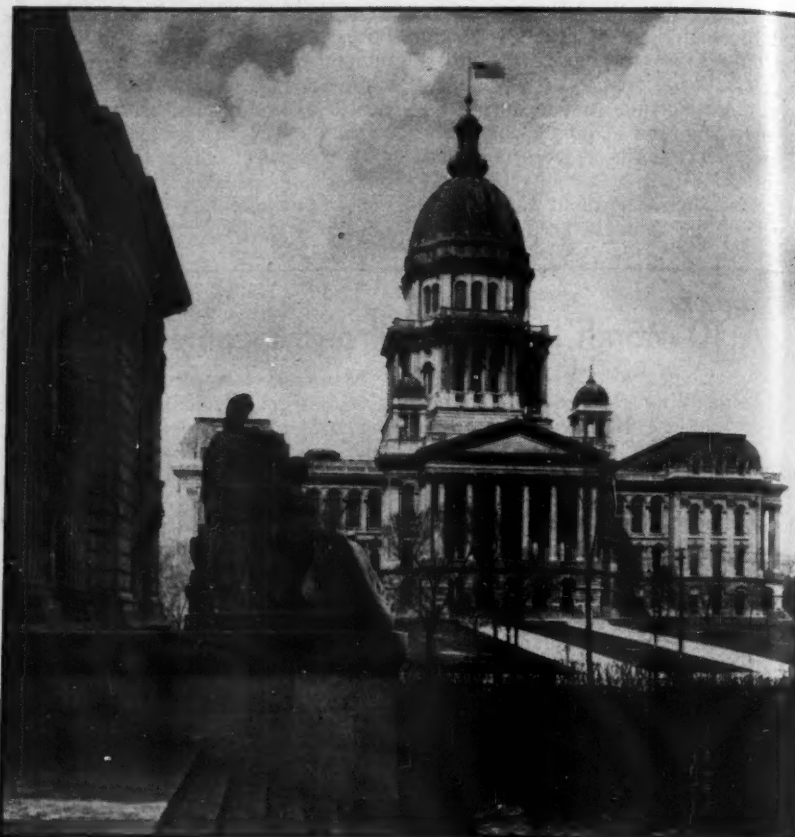


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# LABOR



IN STATE CAPITOLS like this at Springfield, Ill., unions will propose legislation for . . .

## Revising State Labor Laws

It's sure to be done in most of the states because of Democratic election victory. Some laborites feel chance of getting pro-labor laws passed is greater in states than it is in Washington.

A lot of labor's attention will center on Washington's Capitol Hill in 1949—but not all of it. Union political forces will also be busy in 44 state capitals where legislative sessions are scheduled. Labor's local politicians believe that their law-making successes may be greater in the states than in Washington. And they hope to see labor men in key administrative jobs.

• **Double Aim**—Stepped-up union activities in the state capitols next year will have a double aim:

(1) To get laws restricting unions off statute books in at least 34 states—and to pass other laws backed by labor.

(2) To keep union political machinery in good working condition for 1950. Both A.F.L. and C.I.O. have been worried lately lest state and county political units lose interest. They count on lively state legislative

programs to keep interest—and organizations—in working shape.

• **State Victories**—Labor's League for Political Education (A.F.L.) and the Political Action Committee (C.I.O.) assess their state political victories on Nov. 2 as "almost as important" as congressional gains. L.L.P.E., for instance, backed 17 winners and six losers in gubernatorial races; P.A.C. had 14 winners (all Democrats) among 17 candidates endorsed in governors' races.

Both report big gains made in practically all state legislatures. In most instances, the endorsed candidates who won were Democrats; Republicans generally were opposed by the unions as "unfriendly." This will show up in some significant changes in the political structure of legislatures.

• **Legislative Gains**—Utah and Ohio legislatures will be Democratic in 1949

—a switch from Republican majorities. Democrats have never dominated the Massachusetts assembly, but next year they will have control of the House and a tie in the Senate. They also will have a tie in the Minnesota legislature, will control the lower house in North Dakota.

There were also big Democratic and labor gains in Idaho, Iowa, Maine, Colorado, Connecticut, Delaware, Illinois, Indiana, Kentucky, Michigan, Montana, Missouri, New York, North Carolina, Oklahoma, Pennsylvania, Washington, West Virginia, and Wisconsin.

L.L.P.E. and P.A.C. also claim significant gains in the Deep South. Louisiana voters reelected only one state senator and one state representative who had voted against unions in passing state labor laws.

• **Gubernatorial Gains**—L.L.P.E. and P.A.C. endorsed winning gubernatorial candidates in a total of 17 states: Arkansas, Colorado, Connecticut, Delaware, Florida, Illinois, Indiana, Iowa, Louisiana, Massachusetts, Michigan, Missouri, Montana, North Carolina, Rhode Island, Tennessee, and West Virginia. L.L.P.E. backed losers in Minnesota, Wisconsin, North and South Dakota, Utah, and Washington. P.A.C. was behind losing candidates in three states—Minnesota, Oregon, and Washington.

• **Repeal Aims**—Labor's main legislative objective will be to repeal "antilabor" laws. Since 1946, 34 states have adopted laws opposed by unions.

These include: bans or curbs on closed-shop and union-shop contracts and on the checkoff of union dues; state curbs on mass picketing, boycotts, and jurisdictional strikes; requirements of union registration and reports; and laws requiring delays in strike action in some—or all—industries. Unions plan to demand repeal of "all state legislation detrimental to the rights of organized workers." Some successes are sure (BW—Nov. 27 '48, p102).

• **Delaware Outlook**—The legislative outlook in Delaware is typical of that in many industrial states. The last General Assembly, two years ago, passed what has been described by labor as "the most vicious piece of antiunion legislation in the country." Legislation to repeal the law has already been drafted.

Both state Republican and Democratic parties concede that the Delaware labor law will be erased from the books without any difficulty. Party leaders also say that legislation which could be regarded as restricting union activities would have little or no chance for passage in 1949.

Former Gov. Harold Stassen's Minnesota labor code will be among those under legislative fire in 1949. This

(Advertisement)

## BUSINESS IN MOTION

### *To our Colleagues in American Business ...*

This is the story of a briefcase with a new combination lock. In fact, it is the story of a growing line of leather goods bearing the lock. The people who carry that luggage probably are conscious of nothing except that it looks very well indeed, and that the combination lock is new in design, easy to operate, and entirely reliable. What more should they ask?

But there is an inside story that they would never dream of. They would never think that there is any connection between a compact carried by the ladies, and a lock on a briefcase carried by the men. But there actually is. You see, the leather goods company wanted that lock to be as near perfect as possible. Like anybody with a new idea, it was fussy about

reaching for perfection. So it went to a manufacturing jeweler to have the lock made. The idea was that such a company certainly could make the lock with the necessary beauty, precision and economy. It was an excellent idea, though somewhat unorthodox from the viewpoint of those who think only in terms of what is called "normal channels of trade." It is a pleasure to report that the association has proved to be extremely successful.

Revere entered this picture because

the jewelry maker is an old customer for some of Revere's finest metals. Specifications for the lock included the use of solid brass for both exposed and operating parts for which beauty, reliability and corrosion-resistance are required. Die castings and also steel are used in their appropriate places, thus again demonstrating that there is no one metal suitable for every use, but that each metal has its proper field. Incidentally, solid brass is not only used in the lock, but also in the handle posts.



This case of the combination lock interests Revere not only because it uses Revere brass for quality, but because it represents a lot of imagination in selecting a fabricator. If a jewelry firm can make locks, perhaps a coppersmith could make earrings, and diversification would add to the security and profits of both. Imagination is a precious thing. Some people consider it the most important factor in business. Revere thinks it has some imagination, as have all good suppliers to business. Whatever it is you make, Revere suggests you ask your suppliers to do a little thinking with you and for you. After all, every bill you pay, as well as every one you send out, includes an inevitable charge for brains, know-how, imagination.

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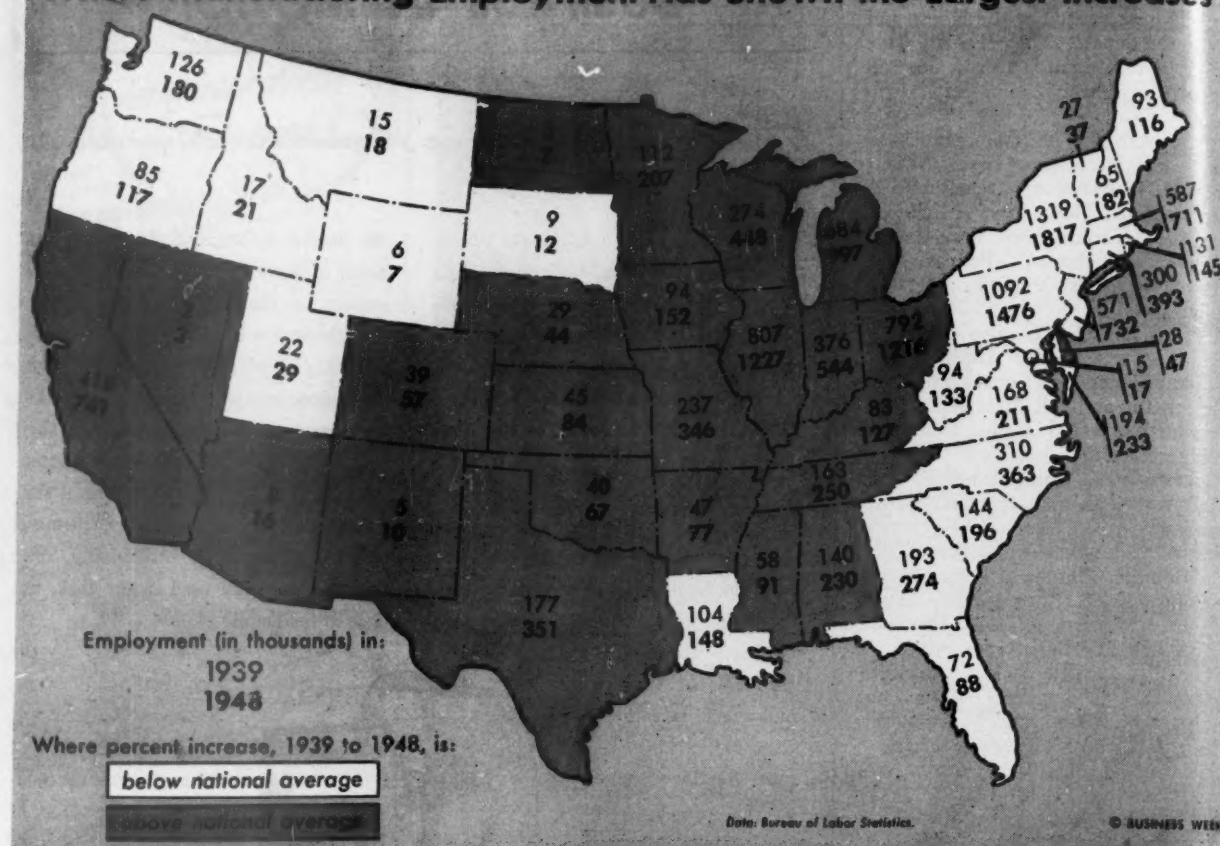
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low requires a 10-day cooling-off period before a strike, restricts the right of workers to strike in "essential" industries, and bans secondary boycotts.

• **Labor's Program**—What will the unions lobby for in 1949? The answers showed up pretty clearly last week at the 15th annual State Labor Legislative Conference in Washington. The conference, called by the U. S. Dept. of Labor, was attended by 145 state and union representatives. The conferees discussed problems of labor legislation for three days.

The final program, adopted after frequently sharp debate, is advisory only. But state lawmakers are going to hear a lot about it from the unions in the next few months: It's going to be urged as labor's program for the states.

• **Recommendations**—Here are some of the important recommendations:

(1) Better workmen's compensation laws—including compulsory coverage in states where coverage is now voluntary; broadened protection for workers; and increased benefits. All states now have workmen's compensation laws. But labor claims that payments of less than \$25 a week (in more than 20 states)

are inadequate, and that there should be other revisions, too.

(2) State wage-hour laws—setting minimum wages (\$1 an hour is suggested) and a work-week of 40 hours or less in employment that doesn't come under the interstate commerce definition in the federal Fair Labor Standards Act. Currently, 22 states have no wage-hour laws; unions argue that a lot of the others aren't adequate.

(3) Establishment in the states of labor-management-public advisory councils to help promote "sound labor legislation."

(4) Stronger child-labor laws—a proposal that was resisted in the conference by spokesmen from the South and Midwest, who said that children's help on farms is essential in moving bumper crops.

(5) Stronger state labor departments—and a strengthened federal labor department, as well.

(6) State laws requiring employers to give time off, without loss of pay, for voting in all elections.

(7) Improved safety and medical laws; standardized employment services and unemployment compensation in

the states, pending a restoration of federal control; regulation and licensing of labor contractors and employment agencies; tighter regulation of private trade schools by the states, to wipe out "racket" schools which "destroy the apprenticeship standards of all trades, and relations with the employers."

The U. S. Dept. of Labor has drafted "model" laws for state use on many of these proposals—including those involving wages and hours, child labor, workmen's compensation, and safety and health protection.

• **Disagreements**—A civil rights law proposal, pushed by C.I.O., was rejected by the conference with the aid of A.F.L. representatives. Another disagreement—and a much more important one—developed between the major labor organizations on what should be in the next federal labor law. C.I.O. called for complete return to the Wagner act; A.F.L. was willing to commit itself only to a return to the "spirit" of the Wagner act. The conference finally reached a safe compromise: It limited its resolution to repeal of the Taft-Hartley act.



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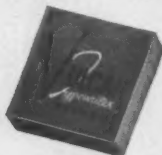
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## "Taft-Hartley Strike" Enters Second Year



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## Second Year

Chicago newspaper shutdown is likely to last as long as T-H does: Law's closed-shop ban is I.T.U.'s real target.

The first strike of the 98-year-old printers' union against the Chicago newspaper publishers has gone into its second year. The dispute that caused it began with passage of the Taft-Hartley act; it is almost sure to last until that law is either repealed or drastically amended.

By use of a substitute printing method—varityping combined with photoengraving—the publishers of the Chicago Daily News, Herald-American, Journal of Commerce, Sun-Times, and Tribune have put every issue on the street.

• **Wage Loss**—The 1,500 striking members of Local 16 of the International Typographical Union (A.F.L.) have lost an estimated \$7.5-million in wages—plus about \$750,000 they would have received in pay raises under contracts the publishers offered.

Instead, they have collected strike benefits totaling nearly \$5-million—at the rate of \$60 a week for married workers, \$40 a week for single workers, plus extra payments for special assignments, such as giving out handbills. Strike benefits are paid from a special assessment on all I.T.U. members in the U. S. and Canada. It amounts to 5% of their gross pay, before deductions for taxes, pensions, etc.

• **Casualties**—The Chicago strikers consider themselves real casualties of what organized labor has branded a "slave labor" law. In view of what is likely to happen to that law, theirs will go into the books as the classic Taft-Hartley strike.

The strike began at 9 p.m., Nov. 24, 1947. The publishers had refused to boost the pay of day printers \$14.50 a week, to \$100, and nightshift printers \$15 a week, to \$106.

• **The Real Issue**—But the wage issue was chiefly a sham—an attempt by the union to have the record show that the strike was an economic one. The real issue was the T-H act ban on the closed shop—which outlawed a practice Local 16 had maintained in Chicago composing rooms for more than 55 years.

The publishers had no objection to the closed shop itself. In fact they told Local 16 that they would be glad to grant it—if the law permitted them to. But the publishers insisted on a written contract—and one which complied with the law.

• **No-Contract Policy**—I.T.U., on the other hand, refused to sign any contract



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Freight cars, which used to cost \$2,500 apiece, now cost more than \$4,000. And the prices that railroads must pay for fuel—whether coal or oil—have considerably more than doubled since 1939.

But in the same years the rates that railroads charge for their essential services have gone up less than half as much as the average increases in wage rates and the prices railroads

must pay for materials and supplies.

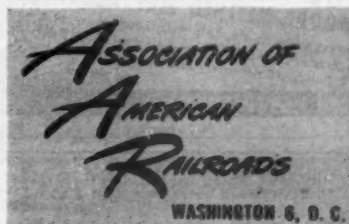
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at all. It had adopted this no-contract policy in August, 1947, at its national convention in Cleveland. It was intended as a device to preserve the closed shop despite the T-H law.

I.T.U. policy, as put forward by its president, Woodruff Randolph, simmered down to this: The union would decide on the wages and conditions of employment it wanted. It would post them in the composing room, and the publisher would comply. There would be no written contract and no collective bargaining; the union would set the terms of employment, unilaterally.

• **Futile Efforts**—Right after the convention, a committee representing the American Newspaper Publishers Assn. met with Randolph in Indianapolis, I.T.U. headquarters. Their object: to work out some sort of understanding on the union's no-contract policy. The effort was futile.

Local 16 and the Chicago publishers held 18 meetings before the strike. The Federal Mediation & Conciliation Service participated in several of them, but was asked by the parties merely to stand by.

And after the strike began, Mayor Martin H. Kennelley of Chicago held four futile meetings with the publishers, Local 16 officials, and Randolph. He gave it up as hopeless.

By then it had become obvious that Chicago was to be the battleground for (1) the union's stand against T-H and for the closed shop, and (2) the publishers' stand for lawful contracts.

• **Issues**—Other issues were involved, of course. Wages were one.

And there was one point on which the publishers stood firm: They would not incorporate I.T.U. bylaws in any new contract. This clause was in the old contract—forced on the publishers in 1946 under threat of a strike. Randolph has insisted that I.T.U. laws are not arbitrable. This, said the publishers, in effect transferred all authority over composing-room operations to the union, and left the publishers at the mercy of the union on anything covered by the bylaws.

• **Publishers' Stand**—The publishers took the position that they could not even discuss other issues until the union agreed to sign a lawful contract.

Finally, to meet the publishers' protest against the no-contract policy, the union offered a contract it said it would be willing to sign. But this contract preserved the closed-shop as well as other features which the publishers contended were illegal under T-H.

• **NLRB Called In**—Meanwhile, the American Newspaper Publishers Assn. had accused I.T.U. of unfair labor practices, and complained to the National Labor Relations Board. NLRB issued a complaint against the union.

In addition, NLRB went to the U. S.



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## CHICAGO DAILY NEWS

WEDNESDAY, DECEMBER 3, 1947

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### none Rates Increased Again

#### LATE BULLETINS

... (text continues) ...

#### RACE RESULTS

... (text continues) ...

#### Subotage Train; 20 Dead

... (text continues) ...

#### Bull Brings Record Price

... (text continues) ...

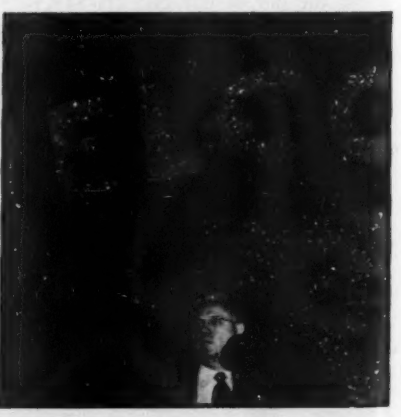
#### NEW YORK STOCKS

... (text continues) ...

#### Gang Robs Tourists of \$9,000

... (text continues) ...

NEWSPAPERS to keep publishing throughout the strike. But this new technique poses a serious threat to the . . .



CENTURY-OLD printers' craft union, and its president, Woodruff Randolph

District Court in Indianapolis for a temporary injunction against I.T.U. This was done under a section of the T-H law which provides that a temporary injunction may be issued pending final determination by NLRB as to whether a union is guilty of unfair labor practices.

• **Injunction**—After extended hearings, Judge Luther M. Swygert issued the injunction on Mar. 27. It restrained the union (1) from insisting upon closed-shop conditions, (2) from refusing to bargain in good faith for a contract of definite duration, (3) from insisting on a 60-day-cancellation clause, (4) from causing or attempting to cause employers to discriminate against non-union printers, and (5) from authorizing or engaging in strikes or slowdowns to further any prohibited practices.

Soon after the decree was issued, Local 16 and the publishers resumed negotiations. But nothing came of it. In April, the publishers offered a complete proposal, including a \$6-a-week raise. Local 16 scoffed at the \$6. In May, the publishers raised the pay-boost offer to \$9 a week. Local 16 countered by raising its demand.

• **Contempt**—Late in August, Denham's office filed a contempt-of-court case against I.T.U. and its four top officials. I.T.U. and the officers were charged with having violated the injunction. On Oct. 14, Judge Swygert adjudged the union and the officials in contempt of court. He gave them a set of instructions to follow in order to "purge" themselves of contempt, and ordered them to pay the costs of the court case.

The union attempted to comply with the court order. Its effort consisted chiefly of notifying all 850 locals that contract provisions that required employers to discriminate in any way against nonunion printers were withdrawn. And it reported to the court on what it had done.

• **Compliance**—Last week Judge Swygert ruled that it "would appear" that the union and officials had complied with the "terms of purgation." But he gave the government an opportunity to renew contempt charges against the union if locals later demand clauses which are held to be discriminatory.

And he specifically declared that he was "not approving in their entirety" the modified hiring and apprenticeship provisions sent by I.T.U. to the locals since Nov. 15 for inclusion in contracts.

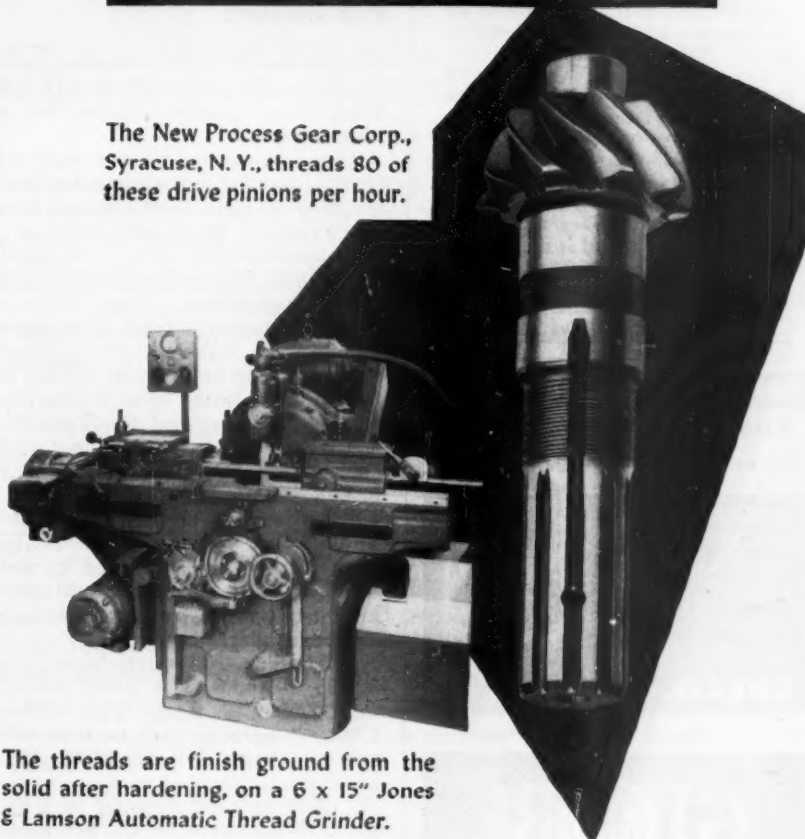
• **No Progress**—Meanwhile, Local 16 and the Chicago publishers have been negotiating on almost a regular schedule. Both sides for weeks have issued the same report: "No progress."

It appears that the publishers now are willing to settle only on their own terms. And the union is holding out for repeal of the T-H act, and hoping for a restoration of the closed shop by the 81st Congress.

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The dividend on the Common Stock is at the rate of 25c per share and is payable December 20, 1948 to stockholders of record at the close of business December 10, 1948.

The dividend on the 5% Preferred Stock is at the rate of \$1.25 per share and is payable January 1, 1949 to stockholders of record at the close of business December 10, 1948.

MILTON L. SELBY, Secretary.

November 19, 1948.

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of BUSINESS WEEK

## Teamsters Out

Move into West Coast aircraft is balked as NLRB backs up I.A.M. strike at Boeing as no contract violation.

Dave Beck's A.F.L. Teamsters have hit a snag. They can't move into the West Coast aircraft industry, for a while anyway.

They have just had the door slammed on their first big drive—organizing Boeing Airplane Co.'s Seattle plant. This puts a crimp in Beck's plans to set up a new aircraft workers' union in competition with the independent International Assn. of Machinists.

The Teamsters' setback came when the National Labor Relations Board ordered Boeing to deal with I.A.M., as collective bargaining agent for employees. Both Boeing and the Teamsters had argued before NLRB that I.A.M. lost its bargaining rights by striking at Boeing last Apr. 22.

• **Strike Starts It**—Beck's multi-industry Teamsters set out to organize Boeing when I.A.M.'s walkout failed to shut down the plant. At first, Beck aimed his drive only at trucking and warehousing employees.

Later, Beck's organizers began signing up all workers who passed through the Machinists' picket lines. When I.A.M. voted to go back to work without a contract (BW—Sep. 25 '48, p108), the Teamsters stepped up their organizing. Beck took out a charter for a new local. Its avowed object was to organize Boeing from top to bottom. Daniel Tobin, international Teamsters president, and then the A.F.L. executive council, approved Beck's industrial-union plans, despite some opposition from West Coast A.F.L. unions.

(An A.F.L. convention delegate in Cincinnati recently tried to criticize what he called a Teamsters' tactic of "endorsed organized scabbery behind a bona fide union picket line." He was quickly choked off.)

I.A.M. has been busy mending its union fences since its strike ended. The Teamsters also have been plugging along to get memberships. But unless Boeing is able to upset NLRB's new decision in federal court, the Teamsters now appear to be frozen out at the aircraft plant—at least until the next I.A.M.-Boeing contract expires.

• **Boeing Argument**—Boeing refused to negotiate with I.A.M. after the Machinists struck five months ago. In its case before NLRB, the company argued: (1) The union broke a no-strike clause in its contract, and therefore lost its right to represent plant employees; and (2) it did not serve the 60-day strike notice

required under the Taft-Hartley act. Boeing's contract was signed in 1946, and ran for one year. It specified that the pact would continue in effect until a new one was signed. Hence, Boeing contended, the contract was still in effect when the strike started.

• **NLRB Reasoning**—NLRB agreed that, after negotiations for a new contract opened in January, 1947, the old contract continued as an "interim agreement." But it held that 14 months of negotiation had exceeded a "reasonable" time for reaching a new contract. NLRB said the interim agreement could therefore be terminated.

Similarly, the board rejected the company's contention that strikers had lost their status as employees by failing to give a 60-day strike notice under the T-H act. The board ruled that this requirement wasn't retroactive; it did not apply to negotiations under way before passage of the act.

## LABOR BRIEFS

Textile employers in Massachusetts, Rhode Island, and Connecticut have rejected a C.I.O. demand for a 10¢ hourly raise. Next step: arbitration.

• **Niles-Bement-Pond** employees will be represented by C.I.O.'s auto workers. They rejected A.F.L. affiliation, 1,098 to 452. The group was one of first in Hartford revolt against C.I.O. electrical workers' union last spring.

• **There's an 8¢ hourly raise** for C.I.O. electrical workers in a new contract with Safety Car Heating & Lighting. Pact was negotiated after company's 450 employees voted to refuse switch to the C.I.O. auto workers.

• **Joint-earnings checks** to Geo. A. Hormel employees are the largest in the 10-year history of the Hormel plan (BW—Oct. 19 '46, p92). Each worker gets 7.452 times his weekly basic salary. Kitty this year is \$2.4-million.

• **Anti-Communist group** of Canadian unions has been organized in leftist Trades & Labor Congress of Canada (BW—Oct. 23 '48, p108). May be first step toward right-wing break from the T.L.C.C.

**The Pictures**—Acme—96 (center, bot.), 98 (top, center); Bob Iser—21; British Combine—108; Ewing Galloway—92; Fritz Henle—106; Keystone—105; Wide World—83 (right), 96 (top), 98 (bot.).

# INTERNATIONAL OUTLOOK

BUSINESS WEEK

DECEMBER 11, 1948

SERVICE

What will Stalin's China policy be if the Communists take over?

There's not much doubt that Moscow will recognize a People's Republic once it's set up. (In return Stalin might ask for submarine bases on the coast.)

But the chances are that Stalin won't want a centralized state under Mao Tse-tung. The danger that Mao might become a Chinese Tito is too great.

So look for Stalin to keep Communist territory from being too well knit. Domination from the Kremlin would be easier that way. (Stalin has opposed a tight Balkan federation for this reason.)

A clew that this will be Stalin's policy is visible in Manchuria. Here the ruler is Li Li-san. He lived in Russia for 18 years, was sent to Manchuria after V-J Day. He's an old enemy of Mao's, doesn't even sit on Mao's Central Executive Committee.

Moscow already has a hand in Mao's military planning and in his secret police. It shouldn't be hard for Stalin to keep a divide-and-rule policy going for quite a while.

France's middle-of-the-road government is gambling its future on a stiff tax program.

It is asking the Assembly for 300-billion francs (\$1-billion) in new money via higher taxes and forced loans. The Queuille government promises to cut its costs by 150-billion francs. A third of the cutback would come from nationalized industries.

The idea, in a nutshell, is for France to eat its cake and have it, too. Capital investments already scheduled wouldn't be slashed. Inflation would be braked or halted.

The question is whether the Assembly will approve the program. Or, if it does, whether the French people will go along.

De Gaulle thinks the government will stub its toe on this tax issue. If he's right, the chances for political and economic stability in France are pretty slim.

The recent coal strike in France did more damage than Paris admits.

The score: loss of about 3½-million tons of coal, more than 200,000 tons of steel.

To meet its coal needs, France has ordered an extra 2-million tons from the U. S.

But this will mean a cut in imports of U. S. raw cotton. So production of textiles is likely to fall below prewar.

World Bank loans of \$150-million are in the offing.

The money will go for economic development in Latin America, Europe, and the Far East, thus:

Brazil: \$75-million to Brazilian Traction, Light & Power Co., Ltd., for expansion of power and phone facilities. The loan will be guaranteed by the Brazilian government.

Mexico: \$40-million for power development, chiefly in the Mexico City area. (There's a good chance Mexico will get more funds later for irrigation, railways, ports, highways.)

Philippine Republic: \$15-million for two hydroelectric projects on the

# INTERNATIONAL OUTLOOK (Continued)

**BUSINESS WEEK**  
**DECEMBER 11, 1948**

island of Luzon. (American firms are expected to supply all the equipment and the know-how.)

Belgium: \$15-million for private industrial expansion. The Belgian government will guarantee repayment.

Austria and Soviet satellites: \$8-million to buy lumbering equipment in the U. S. This is to increase timber shipments to western Europe from Czechoslovakia, Yugoslavia, Finland, and Austria.

Brazil would like to top Labrador and Venezuela as an iron ore source for the U. S.

Government planners in Rio de Janeiro already talk in terms of 40-million tons a year.

They want to get 75% of that out of the Itabira region. But this would mean a broad-gage railway from Itabira to Ira Cruz, a big new ore dock, lots of mining equipment.

They hope the money—\$300-million or more—will come from the U. S.

U. S. members of the joint Brazil-U. S. mission now at work in Rio aren't steamed up over a Brazilian ore project.

They think it's too ambitious; that much of the financing can be done in Brazil; that U. S. interests will have to get more favorable terms before they kick in a nickel.

The whole project looks like a pipedream in present form. U. S. steel men count on Labrador and Venezuela as their big outside sources of ore.

They want plenty of manganese from Brazil. But they aren't likely to put much money into developing Brazilian iron ore. They don't like Brazil's economic climate—or the long, vulnerable haul in case of war.

The rumor in Buenos Aires is that Anglo-Argentine trade is on the rocks.

The story goes this way: Britain now has sources of meat right in the Commonwealth. So London will buy Argentine beef in 1949 only if there is a big cut in prices. But Miguel Miranda, Argentina's economic boss, will not budge on the price question. He would rather sell his meat locally at controlled low prices or can it for the American market. (He thinks he can sell \$100-million worth of canned meat in the U. S.)

What's happening, of course, is this: London and Buenos Aires are both playing a cat-and-mouse game. Each side is helping the rumors along. But pretty soon they will have to talk business on Britain's 1949 meat contract. There are several good reasons why:

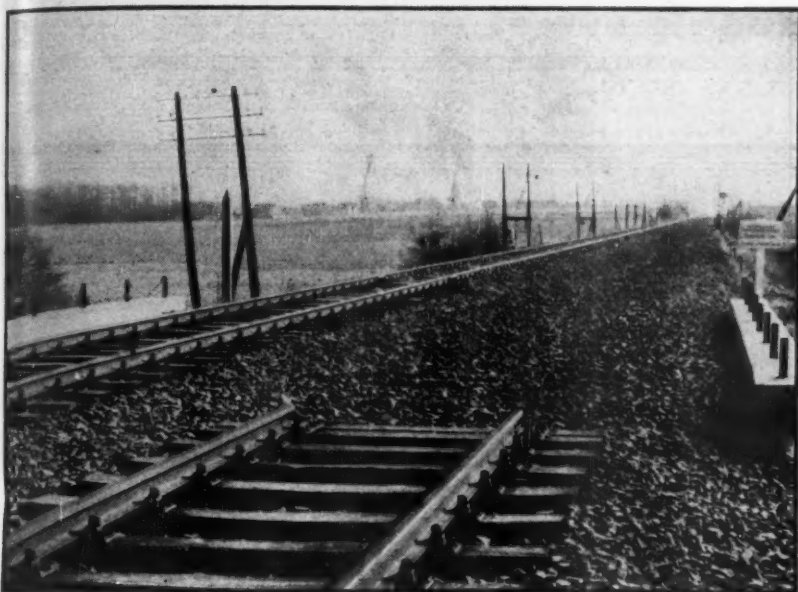
- (1) The British can't get along without Argentine beef.
- (2) Argentina needs British coal, locomotives, machinery, and whisky. It will have to sell its beef to Britain if it wants coal, etc. in return.
- (3) The U. S. won't be in the market for \$100-million worth of Argentina canned beef.

German firms are beginning to handle U. S. auto agencies in Bizonia.

A New York exporter has named Autohaus Fritz Opel & Co., Frankfurt, as its agent to service owners of American-made cars.

Another German firm in Wiesbaden will sell and service Packards. A third, in Frankfurt, will represent Studebaker.

# BUSINESS ABROAD



RUSSIANS TORE UP RAILS to push the West out of Berlin. Now they find . . .

## Blockade Pinches Soviet Zone

The Russian scheme backfired. The West's counterblockade has cut off eastern Germany's sources of supply. So Soviet-zone output of coal, steel, textiles has fallen way off.

Last week Moscow reached down into its bag of tricks and came up with a puppet government for the whole city of Berlin.

• **Contempt**—Then at the week end, Berliners showed their contempt. More than 85% of the eligible voters in the western sectors flocked to the polls to take part in the official biennial election for a city government. The Social Democratic Party's clear victory was incidental to the really significant result: Berliners showed they weren't going to be hypnotized by Communist threats and promises.

But Moscow will go on trying to pull rabbits out of its hat to win over the Germans. Soon, maybe next spring, it may propose to the western powers a complete withdrawal of occupation troops—just like that.

• **Economic Squeeze**—These tricks are necessary because an earlier move backfired. The Berlin blockade has failed to drive the West out of the city, has even resulted in a squeeze, bordering on strangulation, in the Russian zone.

Experts close to the Communist-run Central Economic Administration, which rules the economy of the Soviet zone, insist that production over the last six months has dropped 10% to

15% below 1947 levels. For the first time, production lags affected not only nationalized industries but also the Soviet-owned corporations which are run by the Russians themselves. (The Soviet "trusts" account for some 50% of the zone's industrial output.)

• **Heavy Price**—East Germany's steel output is a good example of the price the Soviets have had to pay for their blockade. Last summer the Central Economic Administration announced a two-year plan to boost steel production to 875,000 tons by 1950. That is 35% more than the 1947 output (650,000 tons). But last October the administration estimated 1948 output at only 450,000 tons. The administration's alibi: the heavy drop in reparations deliveries from the western zones.

With coal it's the same story. Output of lignite (brown coal) this year is estimated at something under 100-million metric tons. Last year it was about 115-million metric tons.

Textile production is down, too. Output for the July-September quarter in 1946 was 55-million meters of cloth. In the second quarter of this year it dropped to 30-million meters.

• **Compensation Deals**—The drops in production point up a fact many German

experts have known for a long time: Trade between the eastern and western zones before the blockade amounted to a great deal more than statistics show. Most of the hidden trade represented "compensation" deals—raw and semi-finished goods from western German firms for finished goods from eastern German firms.

These deals were all-important. Take the example of a private textile firm in Saxony. Last September, Communist officials raided the firm and seized more than a million meters of cloth that the company held in hiding. The cloth was bound for the western zones in payment for textile equipment and raw materials to keep the plant going. After the raid the plant had to close up shop.

It is estimated that private firms in the eastern zone got anywhere from 50% to 70% of their replacements parts and raw materials through compensation deals. Government-owned plants got about 30% of their supplies this way. With a wave of arrests the Communists succeeded in halting much of this compensation trading. But in their wake, plant after plant had to shut down for lack of raw materials.

• **Private Enterprise Going**—The western counterblockade has just about knocked out private enterprise in eastern Germany. Before the blockade, compensation deals and the black market were the sole suppliers for private firms. The Communist administration does not allot raw materials to private business. Compensation deals are now virtually stopped. The black market demands western Deutsche Marks for all transactions. And industrialists in the Soviet zone cannot get their hands on Deutsche Marks now.

As far as the Communists are concerned, the death of private enterprise is all to the good. They are giving private businessmen in eastern Germany the "kulak" treatment—widely used in Russia during the 1920's and 1930's to liquidate the middle-class peasantry.

• **Orthodox Tactics**—In the words of Commissioner Selbmann, boss of nationalized industry in eastern Germany, the object is to have "private enterprises work themselves to death." Selbmann's strictly Marxist tactics: (1) "Either they do not fill their quotas under the plan and are expropriated for sabotage," or (2) "they deliver according to instructions . . . which they can only do by the use of illegal compensation deals . . . for which they will also be expropriated for sabotage."

The Soviets think they can afford to butcher private business in their zone. They control almost 90% of the zone's industrial output either through Russian-owned corporations or nationalized plants (BW—Mar. 6 '48, p

109). Private industry was long ago reduced to a meager economic force.

• **Poor Living Conditions**—German consumers will feel the loss most. Private plants were about their only source of manufactured goods. Of the total output of industry directly controlled by the Soviets in the eastern zone, only 10% went to fill consumers' needs. And half of that was funneled off for the Communist hierarchy. With the liquidation of the private businessman, the standard of living in the eastern zone will drop another peg.

The Communists admit that already living is such a poor business in the Soviet zone that the workers show great "unwillingness" to work. So they have consulted the party handbook and come up with another stock answer. Now eastern Germany has a "Stakhanovite" movement—the Russian "speedup."

This is how it works: Last October one Adolf Hennecke, a coal miner, mined 280% more coal than the daily standard. Communist editors and union bosses reacted instantly. Hennecke's feat was blown up to prodigious proportions both in the press and in union meetings. A Communist hero was born.

• **Purging S.E.D.**—Moscow's efforts to leave eastern Germany "safe" for communism aren't meeting with boundless success. This month Marshal Rokossovsky, the Kremlin's overseer for the Central European "front" (Poland, Czechoslovakia, the Baltic states, and eastern Germany), shifted his headquarters from Warsaw to somewhere in the Soviet zone of Germany. His job: to recruit an adequate number of Germans to insure chaos or communism after the Red Army is withdrawn. Some will carry arms; others, instructions on pulling the wool over a German's eyes.

Rokossovsky was called in because propaganda wasn't catching on, even among eastern Germany's Communists and fellow travelers. The S.E.D. is now getting a typical Moscow purge—the routine checkup that all Communist parties go through prior to a major engagement. The objective of the purge is to get rid of Titoism. Many German Socialists and Communists have shown that they, like Marshal Tito, will demand a maximum of autonomy when Germany takes its place in the Cominform. Many have paid for these sentiments with their political necks.

• **Police Force**—It is estimated that the Soviets already have armed a German "police force" of somewhere between 300,000 and 500,000 men. Even without the political leadership to match this, Moscow can pretty well count on a strong weapon to defend its goals after the Red Army leaves. This force, marching under the banner of a united Germany, friendly to Russia, could cause the West plenty of trouble.



PETROLEUM, most U. S. experts think, is the chief key to . . .

## Mexico's Economic Troubles

But U. S. oil companies turn down offer of deal that would take them back into Mexico. So President Aleman is searching for another way to get economic stability.

This week, Mexico began the third year of its new deal. Miguel Aleman, the man who became president in the most peaceful election in Mexican history, was still at the helm.

• **Up and Down**—In the two years since Aleman took office, the Mexican economy has been anything but peaceful. The cost of living has continued to go up; gold and dollar reserves have gone down sharply; and the Mexican peso has been unpegged—cut loose from its old parity of 4.85 to the dollar.

A lot of Mexico's trouble stems from the government's inability to make its nationalized industries work smoothly. The railroads are one case. The oil industry is another.

• **The Key?**—A lot of people around Washington think oil is the key to Mexico's economic troubles. They think President Aleman will have to reconcile his revolutionary aims with the need for private capital—particularly from the U. S.

In the early 1920's, when U. S. oil companies enjoyed their heyday there, Mexico was the second biggest petroleum producer in the world. It exported some 180-million bbl. a year. Now it's in sixth place. Annual exports have shrunk to about 15-million bbl.

• **Expropriation**—Chief reason for the drop is the Mexican government's restrictions on foreign oil companies—British and Dutch, as well as U. S. Opposition to foreign ownership in the

oil fields came to a head in 1938, when foreign oil companies were expropriated and nationalized.

About a year ago, the U. S. oil companies got final payment for the properties that Mexico took over. Among the companies were Standard of New Jersey, Consolidated Oil Corp. (now Sinclair Oil Corp.), and Standard of California. The over-all settlement for the North Americans came to \$29-million.

• **Return?**—Now, ten years after the expropriation, there's talk of getting our oil men down Mexico way once more. This talk is mostly behind the scenes—within the U. S. Congress and the Truman Administration.

It's aim is national security. A booming oil producer across our southern border is just what we need to assure an overland source of supply. And that, oil men argue, calls for Yankee capital and know-how in the Mexican oil fields.

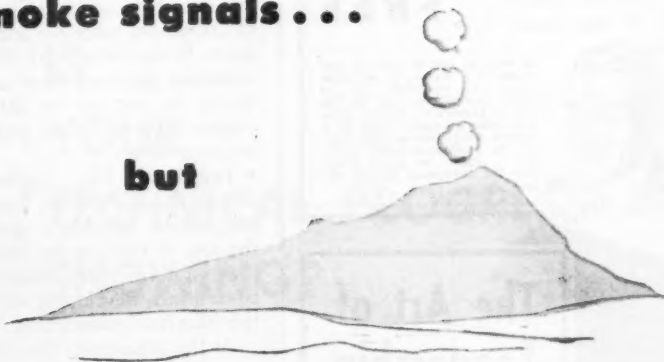
• **Good Business**—Mexico would benefit, too. If it could get its exports up to even half the 1920-21 level, it could wipe out about half its annual trade deficit with the U. S. (Right now Mexico's annual exports to the U. S. are running about \$290-million behind its annual imports from the U. S.)

So Mexico is also thinking about getting the foreign oil companies back. Last spring, Petroleos Mexicanos—Pemex, Mexico's national oil monopoly—sounded out five of our major oil com-



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panies through the U. S. State Dept.  
• **The Deal**—The Pemex proposal boiled down to a so-called 80-20, 20-80 deal:

If oil were found, the companies would get paid for their exploration and development expenses by taking 80% of the profits made on sale of the petroleum; Pemex would get 20%. After the operators got back their capital outlay, they'd be cut in on 20% of future profits; Pemex would pick up the remaining 80%.

• **Turndown**—The Yankee oil men turned the deal down. They figured the proposition wouldn't compensate for the risk of striking dry holes. They felt they would be little more than drilling contractors, developing oil resources for the Mexican government.

At the same time, the oil men point out that Venezuela, now the world's biggest petroleum exporter, got that way by giving foreign operators a 50-50 split. (Venezuela offered an even better deal than that when the foreign operators were just getting under way.)

Right now, there's no indication that Pemex and the U. S. oil companies will get together. Nor is there any indication that the Aleman government is prepared to offer a satisfactory arrangement.

The fact is that an oil deal now wouldn't begin to pay off in a big way for at least a few years. And Aleman figures he needs a quick return to economic stability. So he's looking elsewhere for a solution.

• **The Peso**—Last July, he tried untying the peso from its fixed relation to the

dollar. Since then, it has depreciated more than 40%, to about 6.90 to the dollar.

The action brought no spurt in exports. But, in conjunction with a ban on nonessential imports, it did cut sharply into an unhealthy rate of overseas buying. As a result, Mexico's trade deficit with the U. S. this year will be down almost 25% from last year. And the United States is Mexico's biggest supplier by far, accounting for some 85% of its imports. (The U. S. buys 75% of Mexico's exports.)

• **New Stabilization**—President Aleman has been taking his own sweet time about stabilizing the peso at a new value. He knows that his unpegged peso holds back an inflow of U. S. capital. But he doesn't want to try stabilization at a new value until he's sure it will stick—at least for a couple of years.

Washington observers think Aleman will peg the currency sometime early next year. Talk places the new rate either at 6.90 or 7.00 to the dollar.

• **Help for Industry**—A stable peso will go a long way toward making some of Mexico's dreams for industry come true. Aleman's advisers think it will take upwards of \$200-million in dollars or other hard currencies to do a good job. Plus, perhaps, another \$200-million in Mexican pesos.

So far, the Aleman government has got credits of close to \$52-million from the Export-Import Bank in Washington. Of this amount, Mexico has already spent—or received O.K.'s to spend—a total of \$29-million in the U. S. And



## First Off Australian Lines

The Holden, Australia's first home-built motor car is now rolling off assembly lines "down under". The long-awaited dollar-saver (BW-Jul.10'48,p103) uses only 5% by weight of imported parts and accessories.

The model is produced by General Motors-Holden's Ltd., G.M.'s Australian subsidiary. It's a five-passenger, six-cylinder job—gets over 30 mi. a gal. on test runs. G.M.-Holden's is using eight of its plants to turn out the car.

Mexico is ticketed for a World Bank loan, too. In the spring of 1947, it applied to the World Bank for about \$200-million, to be used for hydroelectric, irrigation, and various transportation projects. The bank has just about made up its mind to let Mexico have some \$40-million for power development.

During the war Mexico made a lot of progress toward industrialization. In 1939, the country had less than 13,000 factories; today, it has an estimated 35,000. During that period, the over-all volume of manufacturing rose about 40%.

• **Yankees Come In**—Mexico's nearness to the U. S., its climate, cheap labor, the potential market, and the accessibility of certain raw materials (principally fuel) have attracted a host of Yankee enterprises during recent years.

U. S. companies already in Mexico include: Celanese Rayon Corp., Continental Can, International Harvester, Burlington Mills, Reynolds Metals, General Motors, Westinghouse Electric, and Libby, McNeill & Libby.

And more are on the way. Eberhard Faber Pencil Co. of New York is building a plant in Mexico City. Sears, Roebuck is going to open up in Monterrey, following its recent debut in Mexico City (where its merchandising methods created a sensation). Johns-Manville is constructing a building-materials plant near San Luis Potosi.

• **Agriculture, Too**—Washington officials look for the present government to continue its drive for more economic development right across the board.

In that drive, agricultural development—particularly through irrigation—will play an increasing role. Economists in this country and below the border agree that Mexico can't be the industrial nation she'd like to unless something is done about getting more out of her soil—by raising the productivity and all-round efficiency of her farming.

These experts point to the fact that Mexico often has to import corn, its basic foodstuff, even though her agricultural resources could be revamped to supply home needs, and more.

There's this fact, too: About 75 percent of the working population of 6-million or 7-million lives by the soil. Until the pitifully low incomes of this part of the population are raised, Mexico won't have a real market for the goods her additional factories will produce.

• **More Business**—Continuation of Mexico's industrialization program will mean more—not less—business for U. S. manufacturers. Steel is a case in point: In 1938, Mexico's capacity was about 190,000 ingot long tons. Now, it's up more than 50% to an estimated 290,000 tons. Nevertheless, imports of steel-mill products from the U. S. have increased six-fold—from 36,000 long tons to more than 200,000.

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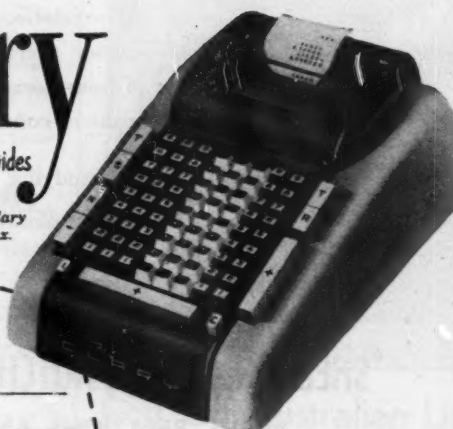
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## ECA'S LEDGER

### Reports From Washington

The congressional "watchdog" committee has finished its first review of ECA activities. For the most part it liked what it saw.

But it did throw a few barbs at ECA's efforts to get strategic materials out of Marshall Plan countries for U. S. stockpiles. The committee complained that there are just too many people in the act. Besides ECA, the National Security Resources Board, Munitions Board, Bureau of Federal Supply, State and Commerce Depts., and the armed forces all have a hand in strategic-materials procurement. The watchdog committee claims that each agency plugs for its own interests in deciding strategic materials buying.

ECA so far has contracts for 26,000 tons of rubber, 2,000 tons of sisal, and \$4-million worth of industrial diamonds. All were purchased in the sterling area with Britain's counterpart fund—the sterling set aside in a special account about equal to Britain's dollar aid under ECA.

Further orders are waiting on reports from the ECA missions in the Marshall Plan countries.

To help get strategic materials out, ECA has set aside \$25-million in grant money. This will be used to buy capital equipment for strategic material projects that can't be undertaken with the local currencies from the various counterpart funds.

### Other Developments

**Policy.** Commerce Dept. is planning to set export quotas for given commodities two months in advance. The move is in line with ECA's long-range programming policy designed to give businessmen a better preview of what business is available under ECA (BW-Sep. 25 '48, p. 122).

**Guarantee Fund.** So far there have been 18 applicants for \$26.5-million worth of ECA guarantees to cover U. S. industrial investments in Marshall Plan Europe. The projects range from a proposal to manufacture watches and clocks in Britain to one for a perfume refinery in France. Only one has been approved—an \$850,000 guarantee for Godfrey Cabot Inc.'s carbon-black plant now going up near Liverpool. (Standard Oil of N. J.'s application for a \$100-million guarantee, to cover construction of an oil refinery in Britain, has been withdrawn.)

**Procurement Authorizations.** ECA authorizations dropped to \$86.2-million for the week ended Dec. 1. The big push in spending is slowing down, pend-

ing new appropriations by Congress (BW—Nov. 27'48, p114).

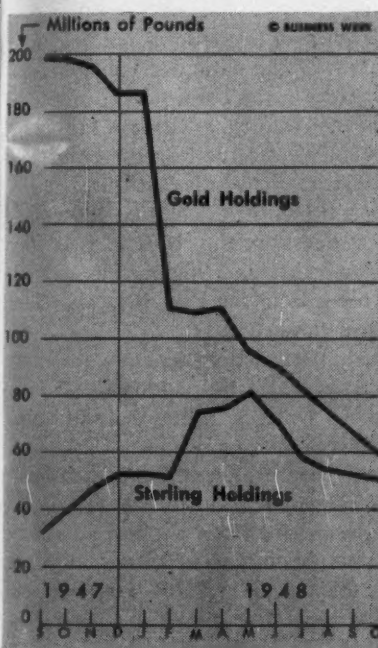
Big item was machinery, \$28.9-million. Machine tools and metal-working machinery made up the bulk of the list.

## Reports From Abroad

**East-West Trade.** ECA is considering a deal to promote trade between Austria and Hungary. Austria wants some \$3.3-million worth of cotton from ECA to resell to Hungary for food.

The deal would benefit both countries and put the skids under one Communist propaganda line to boot. Austria still has a big shortage of fats and grains. A raw-materials shortage has partially paralyzed Hungary's cotton industry. So Russia has been harping on the illusion that the U. S. was trying to cut Austria off from its normal prewar trade with Hungary.

**Netherlands.** This overcrowded country wants to use a big slice of its counterpart fund to create more living and farming space. Much of the fund—now about \$65-million—will go to further reclamation of the Zuider Zee.



## South African Spree

On Dec. 1 South Africa added its name to the lengthening list of countries trying to save dollars by import restrictions. A spending spree in the U. S. had cut South Africa's gold holdings to the danger point. So the country has banned all luxury items, will allow each importer only half as much non-sterling exchange this fiscal year as he got last.

South Africa bought \$243-million worth of goods in the U. S. during the first six months of 1948; it sold only \$67-million worth.

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# THE TREND

## Executive Pay Checks

Numerous changes in top business executive jobs—many more than normal—have occurred since the war. And the rate hasn't seemed to slow down yet.

Each time, of course, the salary question comes up. Nearly always the satisfactory answer is hard to find.

A recent business-policy study by the National Industrial Conference Board went into the problem in considerable detail. This report on "Executive Compensation in 39 Industries" made specific comparisons of individual company data for the years 1942 and 1946.

The data led the board to several observations and conclusions. The most basic, perhaps, is the one fact that most businessmen already know: There is no standardization in individual executive salaries.

This lack of standardization is believed to be due mostly to the wide variations in duties, responsibilities, and authority held by executives with identical titles. A president in one company may be the top salesman as well as the general administrator and policy maker; another president may do an administrative job only—with policy decisions always referred to the directors, and full sales responsibility lodged in a sales manager.

But a trend toward a rather steady relationship between the size of a company, as measured by sales, and the amount of compensation paid to executives is noted. There are many individual exceptions to this general trend, of course. At the same time, it seems well demonstrated that, for large companies that pay high salaries, the cost of management is lower in relation to sales than that of smaller companies.

The highest average aggregate pay of officers and directors in 1946 was reported by the cigarette industry—\$687,500 per company. The six companies surveyed had average net sales of \$335-million, which was also the highest average sales for all industries in the survey. The two figures mean that top management in the cigarette companies got only 0.2% of the sales dollar—second lowest percentage among the industries studied.

By contrast, eight construction companies reported the second lowest average sales. Their executives got the highest average pay as a percentage of the sales dollar, or 1.7%.

Executive pay checks were bigger in the majority of companies in 1946 than in 1942. The average increase for all industries in pay to top management was roughly 32%. Larger sales volume was the main reason, apparently, for boosting the over-all amount spent for executive salaries. Other reasons noted by the board are: (1) higher living costs; (2) larger number of officers and directors in some companies because of mergers and consolidations; (3) removal of wartime salary stabilization; (4) growth of some companies because of new lines of prod-

ucts, and, consequently a large number of executives.

The N.I.C.B. study provides a set of facts that may serve as rough guides for proper salary scales of business executives. But it does not explore the other incentives which are being used more and more by companies to attract new executives or hold old ones. The unique pension plan adopted by Allegheny Ludlum Steel Corp., which puts men at the age of 65 on a consulting basis for 10 years at a salary equal to 40% of their last regular pay, is one of the latest efforts in that direction (BW-Dec. 4 '48, p. 37). Those special inducements must be weighed when you try to determine whether executive pay in your company is in line with general practice.

## Engineers Needed

The demand for engineering specialists is steadily growing in many business fields. Industry has to support engineering schools so that more graduates will be available. Industry also has to make jobs more attractive for engineers.

Those are the highlights of two studies just released. One is based on a survey of the nation's 95 major engineering schools and leaders in the construction industry, made by Engineering News-Record, a McGraw-Hill publication. The other analyzes returns to a survey of 550 industrialists by Rensselaer Polytechnic Institute.

The Rensselaer report shows that 76 of each 100 industry men answering a questionnaire believe that the demand for research scientists and engineering specialists will continue to rise during the next 10 years. The rest see no slackening in the need.

To meet that demand, businessmen generally feel that industry should help provide the additional funds required by engineering colleges. The majority also believes that if the colleges are to obtain and hold top-flight personnel they will have to offer salaries more nearly comparable to those paid in the industry.

Engineering News-Record attributes the current shortage of trained personnel in the construction industry chiefly to the wartime drainage of college-age manpower. It explains that, during the last three years, the 95 colleges graduated a total of 7,158 civil engineering students. Says the publication: "Their present senior classes still reflect the 'supply' shortage—these classes are in general considerably smaller than the classes following."

Within the next four years, the survey shows, more than 17,000 civil engineering graduates will become available to industry. Will these men go into the jobs for which they're needed? The answer is left up to industry. Educators and business leaders, according to Engineering News-Record, seem agreed that industry does not make itself attractive enough to the new graduate. Jobs have to become more interesting salary-wise and on a personal-satisfaction basis.

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